

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



NEW WATER SYSTEM CAPACITY PLANNING MANUAL

**WATER QUALITY CONTROL DIVISION
WATER QUALITY PROTECTION SECTION
WQCD-CMDM-B2
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Introduction

The 1996 Amendments to the federal Safe Drinking Water Act (SDWA) compel each State to develop a program to ensure that all new community water systems (CWSs) and new non-transient non-community water systems (NTNCWSs) demonstrate the technical, managerial, and financial (TMF) capacity to comply with each national primary drinking water regulation in effect or likely to be in effect prior to commencing operations. The Colorado Department of Public Health and Environment (the Department) has the authority to promulgate regulations establishing the requirements new water systems must meet in order to demonstrate adequate capacity.

This *New Water System Capacity Planning Manual* is designed to help new CWSs and new NTNCWSs comply with all applicable requirements. It provides general background information on the purpose and objectives of Colorado's capacity development program and discusses the criteria the Department's Water Quality Protection Section will use to evaluate the TMF capacity of a new system.

Specifically, this Planning Manual provides information on:

- **Construction Approvals.** Each new system must obtain prior written approval to construct a public water system. This approval process requires the system to demonstrate TMF capacity.
- Required **water system documentation**, including all required forms.
- The approval process, including **TMF capacity criteria**.
- The **authority** by which the Department administers this new system program.

If you need more assistance or information about applying for construction approval, please contact the Water Quality Protection Section at (303) 692-3500.

Water System Capacity Development Overview

What is capacity?

Capacity is the overall ability of a system to plan for, achieve, and maintain compliance with applicable drinking water standards. It is an ongoing process of acquiring and maintaining capabilities that enable the system to consistently provide safe drinking water.

What are the components of capacity?

Capacity has three components: technical, managerial, and financial. Adequate capability in all three areas is necessary for a system to demonstrate capacity.

- *Technical Capacity* is the physical and operational ability of a water system to meet SDWA requirements. It refers to the physical components of the water system, including the adequacy of source water and the adequacy of treatment, storage, and distribution infrastructure. It also refers to the ability of system personnel to adequately operate and maintain the system and use required technical knowledge.

Some key questions when evaluating technical capacity are:

- ▶ **Source water adequacy:**
 - Does the system have a reliable and adequate source of drinking water?
 - Is the source adequately protected?
- ▶ **Infrastructure adequacy:**
 - Can the system provide water that meets SDWA standards?
 - What is the condition of the system's infrastructure, including wells or source water intakes, treatment, storage, and distribution?
- ▶ **Technical knowledge and implementation:**
 - Is the system's operator certified to the proper level?
 - Is the operator responsible for all aspects of the operation that may impact water quality?
 - Does the system have an effective operation and maintenance program?

- *Managerial Capacity* is the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with SDWA requirements. Managerial capacity refers to the system's institutional and administrative capabilities.

Some key questions when evaluating managerial capacity are:

- ▶ Ownership accountability:
 - Are the system's owners clearly identified?
 - Can they be held accountable for the system?
- ▶ Staffing and organization:
 - Are the system's operators and managers clearly identified?
 - Is the system properly staffed and organized?
 - Does the owner/manager understand the management aspects of regulatory requirements and system operations?
 - Does the owner/manager have adequate expertise to manage water system operations?
 - Do personnel have the necessary certifications?
- ▶ Effective external linkages:
 - Does the system interact well with customers, regulators, and other entities?
 - Is the system aware of available external resources, such as technical and financial assistance?

- *Financial Capacity* refers to a water system's ability to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with SDWA requirements.

Some key questions used to evaluate financial capacity are:

- ▶ Revenue sufficiency:
 - Do revenues cover costs?
 - Are water rates and charges adequate to cover the costs of water?
- ▶ Credit worthiness:
 - Is the system financially healthy?
 - Does it have access to financial capital through public or private sources?

- ▶ Fiscal management and controls:
 - Are adequate books and records maintained?
 - Are appropriate budgeting, accounting, and financial planning methods used?
 - Does the system manage its revenues effectively?

What types of water systems must meet capacity requirements?

TMF capacity requirements apply to all new CWSs and new NTNCWSs commencing operation on or after October 1, 1999. Colorado requires all new waterworks to meet the capacity requirements.

As defined in the Colorado Primary Drinking Water Regulations (the Regulations):

- *Waterworks* are facilities which produce or treat drinking water to be supplied to the public.
- *New waterworks* are newly constructed public water systems, or existing systems that become, by definition, a public water system by virtue of increasing the number of connections, the number of individuals served, or the number of days of service.
- *A public water system* is a system for the provision of water through pipes or other constructed conveyances to the public for human consumption, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals. A public water system includes:
 - (A) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and
 - (B) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system.
- *A community water system* is a public water system that:
 - (A) Serves at least 15 service connections used by year-round residents of the area served by the system; or
 - (B) Regularly serves at least 25 year-round residents.
- *A non-transient non-community water system* is a non-community water system that regularly serves at least 25 of the same persons over six months per year (schools, workplaces, hospitals, etc.).
- *A non-community water system* shall mean a public water system that is not a community water system.

What is a new system?

New systems include both CWSs and NTNCWSs that are being constructed, as well as systems that do not meet the definition of a CWS or NTNCWS at start-up, but are designed to one day meet the definition. For example, a developer who plans a 30-lot subdivision is required to obtain, among other things, approval to construct the water system even though only six homes will be hooked up to the system when it begins operating.

In addition, an existing system that extends its infrastructure through physical expansion, and thereby grows to become a CWS or NTNCWS, is considered a new waterworks. This also applies to systems that increase the number of individuals served or the number of days of service.

How will the new systems capacity development program be implemented?

The construction approval process will be used to gather information necessary for the Department to determine if a system has adequate TMF capacity.

Construction Approval Process Overview

What is construction approval?

A construction approval is issued by the Division. It certifies that the new water system can commence construction.¹ A new water system that commences construction prior to receiving written approval from the Department will be subject to administrative or civil penalties.

A construction approval is issued after the applicant submits all required documentation and demonstrates that the system has adequate TMF capacity. A flow chart of the approval process is provided as Attachment 1.

What systems are required to obtain construction approval?

A construction approval must be obtained prior to constructing a new waterworks, making improvements to or modifying the treatment process of an existing waterworks, or initiating the use of a new source.

When should I apply for construction approval?

The Department recommends that you apply as soon as possible. It is going to take time to get the required documents approved. If more information is needed by the Department during the review process, it could extend the amount of time to grant approval. We have set the following minimum guidelines for you to follow; however, the key phrase is: the earlier, the better!

- Submit the construction approval application and all supporting documentation at least 45 days before you want to begin construction.

The Department will conduct a completeness review of the materials. If the materials are complete, the applicant will be notified in writing within 45 days whether the project has been approved, conditionally approved, or denied.

¹The Regulations define commencement of construction as, the commencement of the physical effort to construct a project, excluding engineering, architectural, legal, fiscal and economic investigations, studies, and completion of plans and specifications, and surveys. Included in such effort, but not by way of limitation, are site clearance, excavation, construction, and movement on site of an office or construction building.

- If the materials are incomplete, additional information may be required. The Department will send the applicant a list of items which must be addressed before the Department will make a decision.

We also recommend a pre-application conference with the Division design review engineer. Although this conference is not required, the small investment of time will result in improved communication between the applicant and the Department. This can only help to ease the application process.

What if I cannot demonstrate adequate capacity?

The Department will send the applicant a list of items which must be addressed. A list of Technical Assistance providers will be provided to help the system address the issues. If the system cannot, or will not, comply with the items stated in the letter, the construction approval will be denied. If you wish to contest the Department's decision, you may request a hearing. You must:

- File your request in writing with the Department within 30 days after you receive a statement of denial.
- State the grounds upon which you are contesting the denial.
- State the amount of time you think a hearing will take.

All hearings will be conducted in accordance with applicable provisions of Article 4 of Title 24, C.R.S. 1973, as amended.

Why is it important to obtain construction approval?

Obtaining the necessary approval is required by law. Systems that begin construction prior to receiving the necessary approvals will be subject to enforcement action and penalties. More importantly, the approval shows that the water system went through the planning process and demonstrated the capacity to comply with drinking water regulations now and in the future. The planning and approval process will help ensure that the public will be provided with safe water.

When can I begin operating the system?

After the water system has demonstrated capacity, the Department has issued the approval to construct, and the project engineer has certified that the system has been constructed according to the approval to construct and the final plans and specifications, the system can begin service. At the time the system is to begin operations, all requirements of the capacity review must

be in place. Failure to comply with the provisions of the approval will result in enforcement action.

How long is the construction approval valid?

The approval to construct will remain valid as long as the water system is operating according to the final plans and specifications, managerial plan, financial plan, and all applicable regulations. However, if construction has not started within one year of approval, the approval expires. The expired approval can be reinstated if the project remains unchanged and if the applicant re-submits the original plans and specifications to the Department for review and approval. If the project changes, a new construction approval will be required.

If you want to modify or improve the treatment process, or you plan to use a new source, you must secure a new approval to construct. Constructing, improving, or modifying the system without prior written approval from the Department will subject the system to enforcement action and penalties.

Is a construction approval transferrable?

Yes. In order to legally transfer a construction approval to a new owner, the following procedure must be followed:

1. The current owner must notify the Department at least 45 days prior to the proposed transfer date;
2. The notice must include a written agreement between the existing owner and the new owner and state a specific date for transfer of the system, the rights, responsibilities, and liabilities between the parties;
3. The new owner must complete the Drinking Water System Inventory Form and submit it to the Department along with the transfer notice; and
4. The notice must also include a certification that all water system records and the documentation required to obtain the construction approval will be transferred to the new owner before the transfer date. This includes, at a minimum, detailed plans and specifications, including blueprints, a project summary, design calculations, well construction details, a chemical analysis, an inventory form, a lead and copper assessment, a vulnerability assessment, a flood plain certificate, a financial plan, and a managerial plan.

Until the Department receives the above described transfer notice, certification, and Inventory Form, the current owner is responsible for ensuring compliance with all applicable requirements.

Documentation Requirements for Demonstrating Capacity

General requirements for construction approval

Information required by the construction approval process includes the TMF components of capacity. To obtain a construction approval, the following documents must be submitted to, and approved by, the Department's Water Quality Protection Section:

- A water system construction approval application
- Detailed plans and specifications including blueprints
- Project summary
- Design calculations
- Well construction details
- County and Local Health and Planning Department approvals
- Flood Plain certificate
- Inventory form
- Chemical analysis
- Lead and copper assessment
- Managerial plan
- Financial plan

In addition, new waterworks must also submit water rights certification and a well permit, if applicable, from the Department of Natural Resources.

For more information on water rights certifications or well construction approval, please contact the Department of Natural Resources, Water Resources Division at (303) 866-3581.

Water system construction approval application

A new water system plans review application must be submitted on a form provided by the Department. The application must be signed by the responsible person. Applications must be submitted no less than 45 days prior to the planned construction start date. The Department will approve, conditionally approve, issue a written denial of approval, or send a list of items that must be addressed prior to further review and approval to the project engineer. A copy of an application for construction approval is provided as Attachment 2.

Detailed plans and specifications

New systems must submit, with a Professional Engineer's seal, a final copy of the technical specifications and final blueprints. TNCWS specifications and blueprints do not need to have a Professional Engineer's seal. Detailed plans and specifications must conform to the State of Colorado Design Criteria for Potable Water Systems.

For a copy of the State of Colorado Design Criteria for Potable Water Systems, please contact the Water Quality Protection Section at (303) 692-3500.

Project summary

The applicant must also submit a final design report that fully explains the scope of the project, the raw water characteristics, and the alternatives considered.

The system must be constructed in accordance with the approved plans. Any changes, other than minor alterations, require the submission of revised plans and specifications and approval by the Department. A new construction approval must be obtained, prior to making any changes to the system.

Design calculations

A new system must submit a detailed description of the treatment process and unit design loading rates. A public water system must provide treatment in accordance with Article 9 of the Regulations.

Well construction details

All systems using a ground water source must submit a well log, well permit, pitless adapter cross section, grouting details, sanitary well seal specifications, well head elevation, copy of the microscopic particulate analysis if the depth to the screened interval is less than 100 ft., and evidence of a positive slope away from the well.

County and Local Health and Planning Departments

The County and Local Health and Planning Departments must approve all water treatment facilities. It is your responsibility to secure these approvals prior to applying to the Division for an approval to construct. County and local health contact information is included as Attachments 3. A copy of the form is included as Attachment 3.

Flood plain certificate

According to the Regulations Article 2.1.4, waterworks cannot be located within the plain of a 100-year flood event. All new CWSs and NTNCWSs must therefore submit a 100-Year Flood Plain Certification prepared and signed by a Professional Engineer. A copy of a 100-Year Flood Plain Certification is included as Attachment 4.

Inventory form

The applicant must complete and submit a public drinking water system inventory form. The form requires the applicant to provide general system information including approximate number of people served by the system, owner's name and phone number, operators names and phone numbers, and the type of treatment provided for each source. The form must be signed by a system representative. A copy of the form is included as Attachment 5.

Chemical analysis

A system must submit one copy of a raw water chemical analysis from a certified lab. All CWSs and NTNCWSs must submit results for, nitrate, nitrite, sodium, corrosivity (temperature, pH, alkalinity, calcium, and total dissolved solids or conductivity), radiological parameters, and Phase I, II, and V organic/inorganic chemicals. Sample results must have been collected within the last three years.

Chemical analysis results must be submitted on the State reporting form. A copy of the form is included as Attachment 6.

In accordance with the Regulations Article 1.2.3(8), all chemical analysis must be completed by a State certified laboratory. Please contact the Water Quality Protection Section at (303) 692-3500 for a list of certified labs.

Lead and copper assessment

Applicants proposing to use a new source or a treatment process that will affect the corrosivity of the system's potable water must conduct a lead and copper assessment. This requirement applies to existing systems that are modifying or improving the system by adding a new source or treatment process. For new systems, the chemical analysis must include the analysis for corrosivity in Attachment 6.

Managerial Plan

All new waterworks must submit a managerial plan that includes at a minimum:

- A description of the facilities.
- The system owner's name and address, and if any, the name of the chief executive officer, director or agency head, and board of directors.
- A description of the system's organizational structure with a chart showing all aspects of water system management and operation and the major responsibilities of each management and operational position.
- A description of the water system's legal basis, including copies of any leases or easements for land, water supply sources, or physical facilities used in the operation of the system.
- An explanation of startup and normal operation procedures.
- A routine maintenance program consistent with manufacturer recommendations.
- A sampling and analysis program.
- Staffing and training requirements.
- Identification of potential pollution sources to the water supply.
- A safety program.
- A plan for tracking unaccounted-for water use.
- An Emergency Management Plan and operating procedures.

Financial plan

All new waterworks must submit a financial plan that includes, at a minimum, the expected annual costs to operate the system in compliance with the CPDWR, deposits to emergency/replacement funds, and rate/fee structure for at least five years from the date the applicant expects to begin operation. A sample financial spreadsheet is included as Attachment 7.

Criteria for Assessing Technical, Managerial, and Financial Capacity

The Water Quality Protection Section has developed criteria to assess the TMF capacity of new CWSs and new NTNCWSs. All documentation requirements described in the previous chapter must be met in addition to the following:

Technical Criteria

A demonstration of technical capacity is accomplished by documenting that the system has an adequate and reliable source, the needed infrastructure, and the capability for proper operation and maintenance.

Technical capacity criteria must include:

- Finished water must be able to meet all required drinking water standards (i.e. source water adequacy, source water protection, and infrastructure adequacy). Treatment processes must be in accordance with State Design Criteria.
- Personnel must be able to operate the system effectively (ie. the operator must be certified at the proper level).
- The responsibilities of the operator are required to be delineated, with an explanation of those functions that are to be delegated to management or other operational staff. Operator responsibilities usually include:
 - Control of all chemical control processes;
 - Initiation or termination of individual water sources;
 - Unit process control monitoring;
 - Treatment equipment repair and preventive maintenance;
 - Distribution system repair and other functions related to water quality;
 - Compliance monitoring, reporting, and record keeping.
- A valid water rights certification must be obtained from the Department of Natural Resources, Water Resources Division showing sufficient water supply to meet the needs of the projected population to be served.

Managerial Criteria

A demonstration of managerial capacity is accomplished by documenting that the water system has the institutional and administrative capabilities to achieve and maintain compliance with the SDWA.

Managerial capacity criteria must include:

- Identification of the system owner(s), manager(s), and operator(s) and organizational chart.
- Satisfaction of the State s operator certification requirements, including methods of delegating responsibility..
- A system to effectively maintain all required records, distribution system histories/maps, and compliance information.

An Operation and Maintenance manual, to include:

- A description of the facilities.
- A explanation of startup and normal operation procedures.
- A routine maintenance program.
- Sampling and analysis schedules for operational controls and regulatory compliance, and sampling site plans.
- Staffing and training requirements.
- Identification of potential risks to the water supply.
- A safety program.
- A plan for tracking unaccounted-for water.
- Identification of available external resources, such as technical and financial assistance.
- An Emergency Management Plan and operating procedures.
- Manufacturer s manuals.
- Water system policies including:
 - Budget development and rate structure.
 - Water system responsibilities.
 - Customer responsibilities.
 - Cross-connection control.
 - Customer information or public education.
 - Customer complaints.
 - Response and notification if water quality violations occur.

Financial Criteria

To establish adequate financial capacity, systems are required to demonstrate that they have adequate revenues to meet all projected expenses in operating and maintaining the system. The criteria described below require the submission of a projected 5-year budget, including annual costs and revenues, rate and fee structures, reserve funds (i.e. emergency replacement), and operating expenses. A sample financial spreadsheet is provided in Attachment 7.

Financial capacity criteria include:

- Itemization of projected expenses and revenues including such costs as equipment maintenance and replacement and required sampling.
- Comparisons of all anticipated water system revenues and planned expenditures for a 5-year period.
- Identification of reserve accounts for emergencies/replacement funding and O & M funds.
- Access to public and private financial capital.
- Revenues must be greater than costs.
- The system should undertake periodic financial audits.
- The water system should produce and utilize an annual budget.
- Rates should be less than $1\frac{1}{2}\%$ x MHHI (county s average annual median household income).
- The operating ratio must be greater than 1.0.
$$\frac{\text{(Operating Revenue)}}{\text{(Operating Expense)}}$$
- The coverage ratio must be greater than 1.0.
$$\frac{\text{(Total Revenue-Operating Expense)}}{\text{(Debt Service)}}$$
- An emergency/replacement reserve must be created and funded.
- A capital improvement plan should be developed.
- Customers should be metered.

Legal Authority for the Capacity Development Program

Statutory Authority

The statutory authority for Colorado's capacity development program originates in the Colorado Revised Statutes §25-1-107. Colorado introduced capacity development legislation during the 61st General Assembly, Second Regular Session of 1998. The bill was passed by the Legislature and signed by the Governor in 1998.

The Statutes give the Department, among other things, the authority to adopt and enforce minimum general sanitary standards as to the quality of water supplied to the public and to pass rules and regulations to assure adequate protection of the public health.² This includes standards and regulations necessary to enforce the provisions of SDWA and other relevant State requirements.

The statute delegates to the Department the authority to set requirements for the review of technical plans and specifications, long term financial plans, and operations and management plans for any new waterworks.³

Regulatory Authority

The State Board of Health adopted revisions to the Colorado Primary Drinking Water Regulations on November 18, 1998. The Amendments which will become effective January 30, 1999, will be implemented by the Department with the already adopted regulations. The Colorado Primary Drinking Water Regulation Article 2 describes the regulatory requirements of the capacity development program.

Specifically:

- ▶ Article 2.1.3 states that Section 25-1-107(x), C.R.S. 1973, gives the department the power and duty to prescribe standards and regulations as are necessary to assure enforcement of the federal Safe Drinking Water Act, including the power to review and approve plans and specifications for new waterworks or improvements or modifications to existing waterworks.

²The State Board of Health adopts the rules and regulations passed by the Department and establishes standards necessary to administer and enforce the Colorado Public Health laws. C.R.S. §25-1-108(1)(c)(I).

³C.R.S. §25-1-107(1)(x)(II)(A) defines waterworks as facilities that are directly involved in the production treatment or distribution of water for public water systems, as defined in section 141.2 of the National Primary Drinking Water regulations.

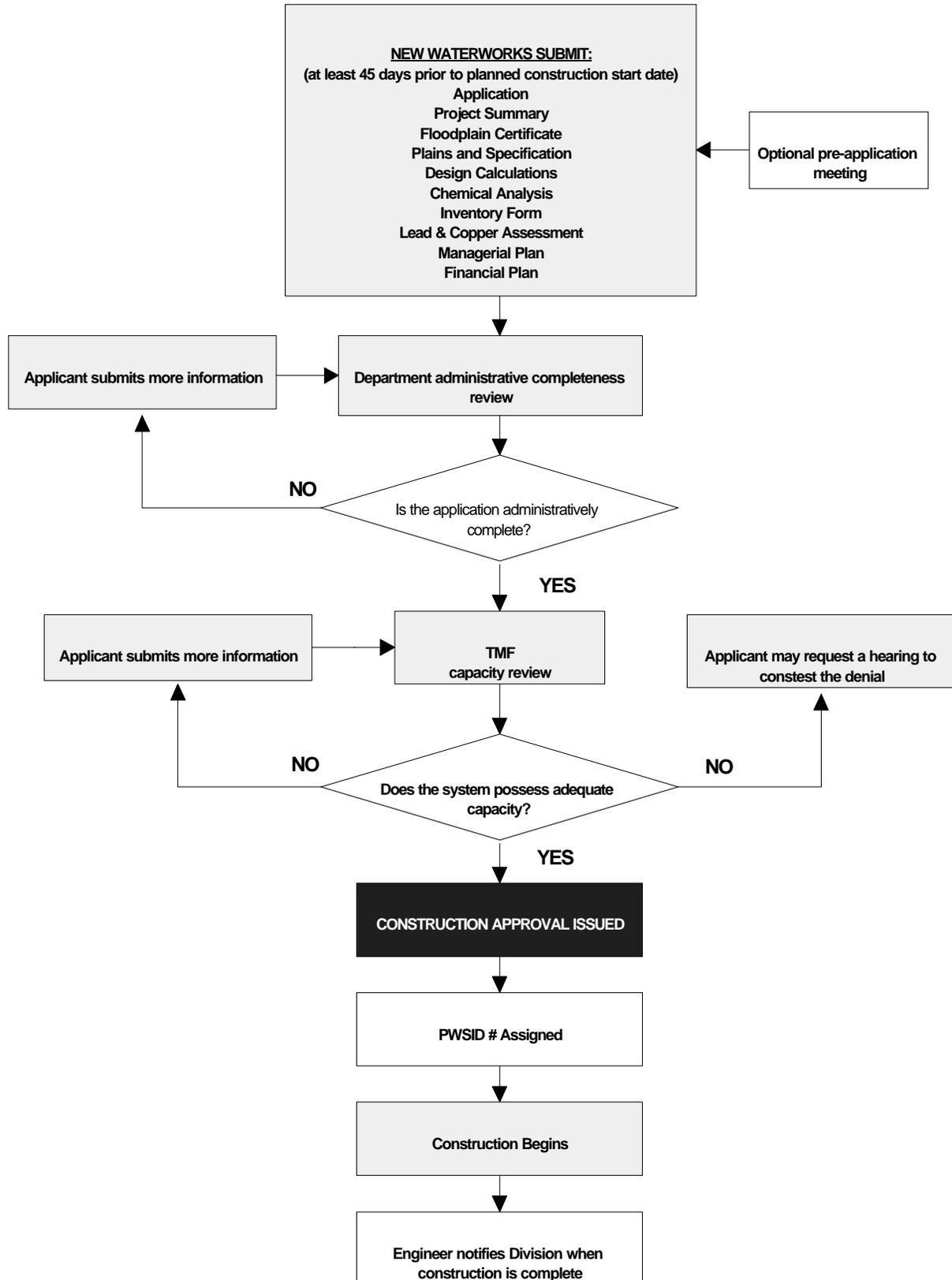
- ▶ Article 2.1.5 says that no person shall commence construction of any new water works, or make improvements to or modify the treatment process of an existing waterworks, or initiate use of a new source, until plans and specifications for such construction, improvements, modifications or use have been submitted to, and approved by the department. All treatment systems serving a community water supply shall be designed by a Professional Engineer registered in the State of Colorado. The Department shall grant such approval when it finds that the proposed facilities are capable of complying, on a continuous basis, with all applicable laws, standards, rules and regulations.

Other Statutory and Regulatory Requirements

Compliance with the capacity development and construction approval requirements in the Colorado Primary Drinking Water Regulations is the first step in providing safe water to consumers. There may be additional obligations that arise from the statutory and regulatory requirements of the Department of Natural Resources, Department of Labor and Employment, Department of Agriculture, Department of Education, and County and Local Health Departments.

Attachment 1 - Construction Approval Flow Chart

Construction Approval Flow Chart



Attachment 2 - Construction Approval Application

Application for Construction Approval

Instructions

- ▶ Complete and sign the application.
- ▶ Attach one copy of the final blueprints and one copy of the technical specifications. The technical specifications and drawings must include a Professional Engineer's seal.
- ▶ Attach one copy of the final design report that explains the scope of the project, raw water characteristics, and the alternatives considered (i.e. Project Summary).
- ▶ Attach a detailed description of each treatment process and unit design loading rates (i.e. Design Calculations).
- ▶ If you are planning to use a groundwater source, attach the well construction details including a well permit.
- ▶ Attach the water rights certification from the Department of Natural Resources.
- ▶ Attach all other required documentation and return the materials to
Department of Public Health and Environment
Water Quality Protection Section
WQCD-TS-B2 - Technical Services Unit
4300 Cherry Creek Drive South
Denver, CO 80222-1530

For addresses/phone numbers of local DPHE offices call 303-692-3500.

It is the responsibility of the system to obtain all needed permits (for discharges, wells, overflow, stream crossing, highway crossing, building, etc.). During the design process, consideration must be given to the special requirements of other state and local regulatory agencies for items such as safety requirements, special designs for the disabled, fire protection, emergency power, plumbing and electrical codes, etc.

WATER QUALITY CONTROL DIVISION
WATER QUALITY PROTECTION SECTION
WQCD-TS-B2 - Technical Services Unit
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80222-1530
(303) 692-3500

PWSID # _____
(For Department Use)

APPLICATION FOR CONSTRUCTION APPROVAL

System Name _____

System Type (e.g. sole proprietorship, partnership, corporation, mutual, government agency)

Address _____ Phone Number (____) _____

City _____ Zip Code _____ — _____

Official/Owner _____ Title _____

Address _____ Phone Number (____) _____

City _____ State _____ Zip Code _____ — _____

Contact Person _____ Phone Number (____) _____

Consulting Engineering Company _____

Project Engineer _____ CO License # _____

Address _____ Phone Number (____) _____

City _____ State _____ Zip Code _____ — _____

Estimated total project cost \$ _____

Estimated bid opening date _____ Estimated completion date _____

Estimated Size _____ (MGD) Estimated population served _____

of Taps _____

Source Water Information (Provide the following information for all sources)::

Surface Water Source

Name(s) _____

Groundwater Aquifer

Name(s) _____

Identify All Domestic and Industrial Water Discharges Five Miles Upstream (Surface Water) or within a 2.5 mile radius of the source (Ground Water). Attach a 7.5 minute USGS topographic map showing water source(s), discharges, and potential contamination sources.

If a Well, What Is the Total Well Depth? _____(Feet)

First Draw Depth at Perforated Casing? _____(Feet)

Source Water Location(s) Latitude _____ Longitude _____

Latitude _____ Longitude _____

Latitude _____ Longitude _____

Location of Water Treatment Facility

Latitude _____ Longitude _____

Distance from Nearest Incorporated Town or City _____

Direction of Nearest Incorporated Town or City _____

Approval by County Health Department:

Signature _____ **Title** _____ **Date** _____

Approval by Local Health and Environment Department:

Signature _____ **Title** _____ **Date** _____

System Legal Representative:

Signature _____ **Title** _____ **Date** _____

Owner's Signature _____ **Date** _____

Date of last revision: _____

Documents Attached:

NOTE: THE DEPARTMENT CANNOT MAKE A FINAL DECISION UNTIL ALL DOCUMENTS HAVE BEEN SUBMITTED.

Plans and Specifications	(Yes/No)_____	If No, date to be submitted _____
Project Summary	(Yes/No)_____	If No, date to be submitted _____
Design Calculations	(Yes/No)_____	If No, date to be submitted _____
Well Construction Details	(Yes/No)_____	If No, date to be submitted _____
Water Rights Certification	(Yes/No)_____	If No, date to be submitted _____
County and Local Health Approval*	(Yes/No)_____	If No, date to be submitted _____
Flood Plain Certificate*	(Yes/No)_____	If No, date to be submitted _____
Inventory Form*	(Yes/No)_____	If No, date to be submitted _____
Chemical Analysis*	(Yes/No)_____	If No, date to be submitted _____
Lead & Copper Assessment	(Yes/No)_____	If No, date to be submitted _____
Managerial Plan	(Yes/No)_____	If No, date to be submitted _____
Financial Plan	(Yes/No)_____	If No, date to be submitted _____

* Forms included in this manual.

Attachment 3 - County Health Contacts

COUNTY HEALTH CONTACTS

ADAMS COUNTY

TRI COUNTY DISTRICT HEALTH DEPT (Administrative Offices) 7000 East Belleview, Suite 301 Englewood, CO 80111-1628 303-220-9200, Fax No. 303-220-9208	Director:	Chris Wiant	303-220-9200
	Adm Dir:	Bob Browning	303-220-9200
	Env Hlth Dir:	Bruce Wilson	303-220-9200
	Nurs Dir:	Mary Carol Ferrera	303-220-9200
	Dir of Planning, Info & Educ:	Linda Ross-Reiner	303-220-9200
Nutrition Dir:	Joy Ranum	303-220-9200	
Cont Coord:	Diana Pierson	303-220-9200	

ALAMOSA COUNTY

ALAMOSA CO PH NURSING SERVICE 403 Santa Fe Alamosa, CO 81101-2860 719-589-6639, Fax No. 719-589-1103	PH Nurse Hlth Officer	Julie Geiser Gary Haddock	719-589-6639 719-589-6639
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ARAPAHOE COUNTY

TRI COUNTY DISTRICT HEALTH DEPT (Administrative Offices) 7000 East Belleview, Suite 301 Englewood, CO 80111-1628 303-220-9200, Fax No. 303-220-9208	Director:	Chris Wiant	303-220-9200
	Adm Dir:	Bob Browning	303-220-9200
	Env Hlth Dir:	Bruce Wilson	303-220-9200
	Nurs Dir:	Mary Carol Ferrera	303-220-9200
	Dir of Planning, Info & Educ:	Linda Ross-Reiner	303-220-9200
	Nutrition Dir:	Joy Ranum	303-220-9200
Cont Coord:	Diana Pierson	303-220-9200	

ARCHULETA COUNTY

SAN JUAN BASIN HEALTH DEPT P.O. Box 140 Durango, CO 81302 970-247-5702, Fax No. 970-247-9126	Director:	Lynn Westberg	970-247-5702x214
	Adm Dir:	Helene Warren*	970-247-5702
	Env Hlth Dir:	Pat Shepherd	970-247-5702
	Nurs Dir:	Deb Banton	970-247-5702x213
	Prev Dir:	Patti Adler	970-247-5702x228

BACA COUNTY

BACA CO PH NURSING SERVICE 700 Colorado Avenue Springfield, CO 81073 719-523-6621, Fax No. 719-523-6537	PH Nurse Hlth Officer	Betty Thys Antonio Manalo, MD	719-523-6621 719-523-6221
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PROWERS COUNTY ENV HEALTH DEPT Southeastern Region 1006 S. 4 th Street Lamar, CO 81052 719-336-8988, Fax No. 719-336-8989	Env Hlth Officer	Monty Torres	719-336-8988
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BENT COUNTY

BENT CO PH NURSING SERVICE 701 Park Avenue Las Animas, CO 81054 719-456-0517, Fax No. 719-456-0518	PH Nurse Hlth Officer	Debbie Six Virley Burkhalter	719-456-0517 719-456-2223
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PROWERS COUNTY ENV HEALTH DEPT Southeastern Region 1006 S. 4 th Street Lamar, CO 81052 719-336-8988, Fax No. 719-336-8989	Env Hlth Officer	Monty Torres	719-336-8988
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BOULDER COUNTY

BOULDER COUNTY HEALTH DEPT 3450 Broadway Boulder, CO 80304 303-441-1100, Fax No. 303-441-1452	Director:	Chuck Stout	303-441-1141
	Adm Dir:	Neal Griggsmiller*	303-441-1142
	Env Hlth. Mgr:	Diana Shannon	303-441-1189
	Dir of Prog:	Mary Davis	303-441-1291
	Dir Com Hlth Serv:	Helen Majzler	303-441-1457

CHAFFEE COUNTY

CHAFFEE CO PH NURSING SERVICE 209 East 3rd Street Salida, CO 81201 719-539-4510, Fax No. 719-539-7197	PH Nurse	Chris Sturgeon	719-539-4510
	Hlth Officer	Thomas White, MD	719-395-8632

P.O. Box 37 Buena Vista, CO 81211-0724 719-395-8493, Fax No. 719-395-8493	PH Nurse	Tracy Craig	719-395-8493
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CHAFFEE COUNTY ENV HEALTH DEPT County Courthouse P.O. Box 699 Salida, CO 81201 719-539-2124, Fax No. 719-539-7442	Env Hlth Officer	Bud Sopko	719-539-2124
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CHEYENNE COUNTY

CHEYENNE CO PH NURSING SERVICE P.O. BOX 38 Cheyenne Wells, CO 80810-0038 719-767-5616, Fax No. 719-767-8747	PH Nurse Hlth Officer	Mary Ann Steiner Mike Smith	719-767-5616 719-767-5669
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<p>KIT CARSON CO ENV HEALTH DEPT Env Hlth Officer P.O. Box 70 252 South 14th Street Burlington, CO 80807 719-346-7158x38, Fax No. 719-346-8066</p>	<p>Jeff Rogers</p>	<p>719-346-7158x38</p>
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CLEAR CREEK COUNTY

<p>CLEAR CREEK CO PH NURSING SERVICE P.O. Box 2000, Courthouse Georgetown, CO 80444 303-569-3251x358, Fax No. 303-679-2448 534-5777X358-Denver Line</p>	<p>PH Nurse Med Advisor</p>	<p>Deborah Ross Rick Santiguida, MD</p>	<p>303-569-3251x358 303-567-9201</p>
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<p>P.O. Box 1820 Idaho Springs, CO 80452 303-569-3251x359, Fax No. 303-679-2445</p>	<p>PH Nurse</p>	<p>Jean Barta</p>	<p>303-569-3251X359</p>
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<p>CLEAR CREEK CO ENV HEALTH DEPT 405 Argentine Street POB 2000 Georgetown, CO 80444 303-569-3251x235, Fax No. 303-569-0731</p>	<p>Env Hlth Officer</p>	<p>Bill Snyder</p>	<p>303-534-5777x235</p>
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CONEJOS COUNTY

<p>CONEJOS CO PH NURSING SERVICE P.O. Box 78 La Jara, CO 81140 719-274-4307, Fax No. 719-274-4309</p>	<p>PH Nurse Med Advisor</p>	<p>Vacant Colin Henderson, MD</p>	<p>719-274-4307 719-274-6000</p>
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COSTILLA COUNTY

<p>COSTILLA CO PH NURSING SERVICE P.O. Box 99 125 Main St. San Luis, CO 81152-0302 719-672-3332, Fax No. 719-672-3856</p>	<p>PH Nurse Hlth Officer</p>	<p>Vivian Gallegos Tom Valdez</p>	<p>719-672-3332 719-672-3629</p>
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CROWLEY COUNTY

<p>OTERO COUNTY HEALTH DEPT 13 West Third Street Room La Junta, CO 81050 719-383-3040, Fax No. 719-383-3060</p>	<p>Director: Bus Mgr: Nurs Dir: Hlth Educ: Env Hlth Dir.</p>	<p>Roger Stasiak* Alice Lucero Lorene Nelson Aaron Martinez Christy Bowman, REHS</p>	<p>719-383-3045 719-383-3044 719-383-3047 719-383-3054 719-383-3053</p>
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CROWLEY CO PH NURSING SERVICE
Courthouse Annex
Ordway, CO 81063
719-267-4737, Fax No. 719-267-4737

CUSTER COUNTY

CUSTER CO PH NURSING SERVICE
P.O. Box 120
Westcliffe, CO 81252
719-783-2380, Fax No. 719-783-2377

PH Nurse
Med Advisor

Barbara Kopke
Robert Bliss, MD

719-783-2380
719-783-2380

DELTA COUNTY

DELTA COUNTY HEALTH DEPT
255 West 6th Street
Delta, CO 81416
970-874-2165, Fax No. 970-874-0222

Director:
Env Hlth Dir:
Nurs Dir:

Bonnie Koehler*
Ken Nordstrom
Deb Tittle

970-874-2167
970-874-2169
970-874-2183

DENVER COUNTY

DENVER PUBLIC HEALTH DEPT
605 Bannock
Denver, CO 80204
303-436-7200, Fax No. 303-436-7211

Director:
Pub Hlth Adm:
Assoc. Dir:
Project Coord:
Nurs mgr:

Franklyn Judson, MD
Sterling Drumwright
David Cohn, MD
Amy Pulver
Jim Bock

303-436-7200
303-436-7333
303-436-7210
303-436-7265
303-436-8452

DEPARTMENT OF ENVIRONMENTAL HEALTH
1391 Speer, Suite #700
Denver, CO 80204-2555
303-285-4012, Fax No. 303-285-5616

Env Hlth Mgr:
Pub Hlth Insp Dir:
Env Pro Dir:

Theresa Donahue
Jim Austin
Steve Foute

303-285-4012
303-285-4074
303-258-4053

DOLORES COUNTY

DOLORES CO PH NURSING SERVICE
Dolores County Courthouse
P.O. Box 368
Dove Creek, CO 81324
970-677-2387, Fax No. 970-677-2815

PH Nurse
Hlth Officer

Joyce Waller
Pau Mayer, MD

970-677-2387
970-677-2291

MONTEZUMA CO ENV HEALTH DEPT
(Food Service Only)
County Annex Building
106 West North Street
Cortez, CO 81321
970-565-3056, Fax No. 970-565-0647

Env Hlth Officer

Diana Fahrion

970-565-3056

DOUGLAS COUNTY

TRI COUNTY DISTRICT HEALTH DEPT
(Administrative Offices)
7000 East Belleview, Suite 301
Englewood, CO 80111-1628
303-220-9200, Fax No. 303-220-9208

Director:	Chris Wiant	303-220-9200
Adm Dir:	Bob Browning	303-220-9200
Env Hlth Dir:	Bruce Wilson	303-220-9200
Nurs Dir:	Mary Carol Ferrera	303-220-9200
Dir of Planning, Info & Educ:	Linda Ross-Reiner	303-220-9200
Nutrition Dir:	Joy Ranum	303-220-9200
Cont Coord:	Diana Pierson	303-220-9200

EAGLE COUNTY

EAGLE CO PH NURSING SERVICE
P.O. Box 86
Eagle, CO 81631
970-328-8819, Fax No. 970-328-6227

PH Nurse Sarah Schipper 970-328-8819

234 Cody Lane
Basalt, CO 81621
970-927-3947, Fax No. 970-927-3963

PH Nurse Jan Clough 970-927-3947

PH Nurse Jeannie Wahrer 970-748-2014

100 W. Beaver Creek Drive
P.O. Box 3419
Avon, CO 81620
970-949-7026, Fax No. 970-949-8120

PH Nurse Ray Merry 970-328-8757

EAGLE CO ENV HEALTH DEPT
P.O. Box 179
Eagle, CO 81631
970-328-8755, Fax No. 970-328-7185

Env Hlth Officer Ray Merry 970-328-8757

TOWN OF VAIL

DEPT OF ENV HEALTH
75 S. Frontage Rd
Vail, CO 81657
970-479-2138, Fax No. 970-479-2452

Env Hlth Officer Patrick Hamel

ELBERT COUNTY

ELBERT CO. PH NURSING SERVICE
P.O. Box 201
215 Comanche
Kiowa, CO 80117
303-621-3144, Fax No. 303-621-2343

PH Nurse Kellyn Pearson 303-621-3143

P.O. Box 293 (Satellite Office)
Simla, CO 80835-0293
719-541-2575

PH Nurse Kellyn Pearson 303-621-3143

EL PASO COUNTY

EL PASO COUNTY HEALTH
AND ENVIRONMENT DEPT
301 S. Union Blvd
Colorado Springs, CO 80910
719-578-3199, Fax No. 719-578-3192

Director:	Krzys Myszkowski, Interim	719-578-3101
Adm Dir:	Vacant	719-578-3102
Env Hlth Dir:	Dan Bowlds	719-578-3129
Nurs Dir:	Marilyn Bosenbecker	719-578-3253
Hlth Educ:	Julie Davis	719-578-3109

FREMONT COUNTY

FREMONT CO PH NURSING SERVICE
172 Justice Center Rd
Canon City, CO 81212-9354
719-275-1626, Fax No. 719-275-4328

PH Nurse	Clarice Little	719-275-1626
Hlth Officer	Victoria King, MD	719-275-0008

FREMONT CO ENV HEALTH DEPT
615 Macon, Room B5
Canon City, CO 81212
719-275-7021, Fax No. 719-275-7538

Env Hlth Officer	Sid Darden	719-275-7021
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GARFIELD COUNTY

GARFIELD CO PH NURSING SERVICE
109 8th Street, Ste #202
Glenwood Springs, CO 81601-4229
970-945-6614, Fax No. 970-945-0155

PH Nurse	Sandra Barnett	970-945-6614
Hlth Officer	Mary Meisner	970-625-5200

902 Taughenbaugh Blvd., Suite #104
Rifle, CO 81650
970-625-5200, Fax No. 970-625-2093

PH Nurse and Hlth Officer	Mary Meisner	970-625-5200
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GILPIN COUNTY

GILPIN CO PH NURSING SERVICE
2960 Dory Hill Rd, Ste 120
Golden, CO 80403
303-582-5803, Fax No. 303-582-5798

PH Nurse	Peggy Rothe	303-582-5803
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Environmental Community Development

P.O. Box 356
Central City, CO 80427

Envir. Specialist	Aaron Weinsheimer	303-582-5214
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GRAND COUNTY

GRAND CO PH NURSING SERVICE
P.O. Box 264
Hot Sulpher Springs, CO 80451
970-725-3347x247, Fax No. 970-725-3330

PH Nurse
Hlth Officer

Ellen Parri
Tracy Dill, DO

970-725-3347x247
970-724-3524

GUNNISON COUNTY

GUNNISON CO PH NURSING SERVICE
321 C North Main St.
Gunnison, CO 81230-2333
970-641-0209, Fax No. 970-641-8346

PH Nurse
Hlth Officer
Env Hlth Officer

Carol Dawson
Jay Wolkov, DO
Richard Stenson

970-641-0209
970-641-1771
970-641-5105

HINSDALE COUNTY

HINSDALE CO PH NURSING SERVICE
c/o Lake City Area Medical Center
P.O. Box 999
Lake City, CO 81235
970-944-2331, Fax No. 970-944-2320

PH Nurse

Laurie Perla

970-944-2331

HINSDALE CO ENV HEALTH DEPT
P.O. Box 277
Lake City, CO 81235
970-944-2319, Fax No. 970-944-2630

Env Hlth Officer

Richard Baumann

970-944-2319

HUERFANO COUNTY

LAS ANIMAS-HUERFANO COUNTIES
DISTRICT HEALTH DEPT
412 Benedicta Avenue
Trinidad, CO 81082
719-846-2213, Fax No. 719-846-4472

Director:
Env Hlth Dir:
Nurs Dir:
Bus Mgr:

Carol Amato
John Martinez
Audrey DeAngelis
Leeann Fabec*

719-846-2213
719-846-2213
719-846-2213
719-846-2213

JACKSON COUNTY

JACKSON CO PH NURSING SERVICE
P.O. Box 355
Walden, CO 80480
970-723-8572, Fax No. 970-723-8447

PH Nurse
Hlth Officer

Fran Burr
Debora Horne, CRNP

970-723-8572
970-723-4255

JEFFERSON COUNTY

JEFFERSON CO DEPT OF HEALTH
AND ENVIRONMENT
1801 19th Street
Golden, CO 80401
303-271-5700, Fax No. 303-271-5702

Director:
Adm Dir:
Env Hlth Dir:
Comm Hlth Svcs:
Hlth Prom Dir:
Nurs Dir:

Mark B. Johnson, MD
Jeannie Tacker*
Jim Dale
Norma Tubman
Elise Lubell
Norma Tubman

303-271-5701
303-271-5717
303-271-5718
303-271-5722
303-271-5719
303-271-5722

KIOWA COUNTY

KIOWA CO PH NURSING SERVICE
P.O. Box 414
Eads, CO 81036
719-438-5782, Fax No. 719-438-2208

PH Nurse
Hlth Officer

LaVerle Kelley
Dr. John Hadley, DO

719-438-5782
719-438-2251

PROWERS COUNTY ENV HEALTH DEPT

Southeastern Region
1006 S. 4th Street
Lamar, CO 81052
719-336-8988, Fax No. 719-336-8989

Env Hlth Officer Monty Torres 719-336-8988

KIT CARSON COUNTY

KIT CARSON CO PH NURSING SERVICE
P.O. Box 70
Burlington, CO 80807-0070
719-346-7158, Fax No. 719-346-8066

PH Nurse
Hlth Officer

Kindra Mulch
R.C. Beethe, MD

719-346-7158
719-346-7158

KIT CARSON CO ENV HEALTH DEPT
P.O. Box 70
252 South 14th Street
Burlington, CO 80807
719-346-7158x38, Fax No. 719-346-8066

Env Hlth Officer Jeff Rogers

719-346-7158x38

LAKE COUNTY

LAKE CO PH NURSING SERVICE
P.O. Box 626, Courthouse
Leadville, CO 80461
719-486-0118, Fax No. 719-486-4164

PH Nurse
Hlth Officer

Madalyn Videtich
John Perna, MD

719-486-0118
719-486-1264

LAKE COUNTY ENV HEALTH DEPT
P.O. Box 513, County Courthouse
Leadville, CO 80461
719-486-1796, Fax No. 719-486-0958

Env Hlth Officer

Vacant

LA PLATA COUNTY

SAN JUAN BASIN HEALTH DEPT
P.O. Box 140
Durango, CO 81302
970-247-5702, Fax No. 970-247-9126

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:
Prev Dir:

Lynn Westberg
Helene Warren*
Pat Shepherd
Deb Banton
Patti Adler

970-247-5702x214
970-247-5702
970-247-5702
970-247-5702x213
970-247-5702x228

LARIMER COUNTY

LARIMER COUNTY DEPT OF
HEALTH & ENVIRONMENT
1525 Blue Spruce Drive
Fort Collins, CO 80524-2004
970-498-6700, Fax No. 970-498-6772

Director:
Adm Dir:
Env Hlth Dir:
Comm Hlth Serv:
Hlth Educ:
Nurs Dir:

Adrienne LeBailly, MD
Marie Kincher*
Jerry Blehm
Averil Strand
Ann Watson
Averil Strand

970-498-6711
970-498-6714
970-498-6776
970-498-6760
970-498-6750
970-498-6760

LAS ANIMAS

LAS ANIMAS-HUERFANO COUNTIES
DISTRICT HEALTH DEPT
412 Benedicta Avenue
Trinidad, CO 81082
719-846-2213, Fax No. 719-846-4472

Director:
Env Hlth Dir:
Nurs Dir:
Bus Mgr:

Carol Amato
John Martinez
Audra DeAngelis
Leeann Fabec*

719-846-2213
719-846-2213
719-846-2213
719-846-2213

LINCOLN COUNTY

LINCOLN CO PH NURSING SERVICE
P.O. Box 125
Hugo, CO 80821-0125
719-743-2526, Fax No. 719-743-2482

PH Nurse
Hlth Officer

Kathy Kruse
Mark Olson, MD

719-743-2526
719-775-2367

KIT CARSON COUNTY ENV HEALTH DEPT
P.O. Box 70
252 South 14th Street
Burlington, CO 80807
719-346-7158x38, Fax No. 719-346-8066

Hlth Officer

Jeff Rogers

719-346-7158x38

LOGAN COUNTY

NORTHEAST COLORADO HEALTH DEPT
700 Columbine Street
Sterling, CO 80751
970-522-3741, Fax No. 970-522-1412

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:

Denise Hase
Laura Jorstad*
Rob Witt
Joy Vondy-Butt

970-522-3741
970-522-3741
970-522-3741
970-522-3741

MESA COUNTY

MESA COUNTY HEALTH DEPT
515 Patterson Road
Grand Junction, CO 81506
970-248-6900, Fax No. 970-248-6972
Nursing Fax No. 970-248-6913

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:
Spec Proj Dir:

Michael Aduddell, OD
Betty Cronkhite*
Steve DeFeyer
Gretchen Sigafos
Larry Chynoweth

970-248-6974
970-248-6976
970-248-6978
970-248-6929
970-248-6971

MINERAL COUNTY

MINERAL CO PH NURSING SERVICE
P.O. Box 425
Creede, CO 81130-0330
719-658-2416, Fax No. 719-658-3001

PH Nurse
Hlth Officer

Sarah Scott
Les Cahill

719-658-2416
719-658-2360

MOFFAT COUNTY

MOFFAT CO PH NURSING SERVICE
745 Russell Street
Craig, CO 81625
970-824-8233, Fax No. 970-824-2548

PH Nurse
Hlth Officer

Susan Birch
Tom Told, DO

970-824-8233
970-824-8233

MONTEZUMA COUNTY

MONTEZUMA CO PH NURSING SERVICE
County Annex Building
106 West North Street
Cortez, CO 81321-3189
970-565-3056, Fax No. 970-565-0647

PH Nurse
Hlth Officer

Bette Anderson
Gerald Griebel, MD

970-565-3056
970-565-3056

MONTEZUMA COUNTY ENV HEALTH DEPT
County Annex Building
106 West North Street
Cortez, CO 81321
970-565-3056, Fax No. 970-565-0647

Env Hlth Officer

Diana Fahrion

970-565-3056

MONTROSE COUNTY

MONTROSE CO PH NURSING SERVICE
P.O. BOX 1289
Montrose, CO 81402
970-249-6603, Fax No. 970-249-0861

PH Nurse
Hlth Officer

Peggy Mewes
Fred Simon, DO

970-249-6603
970-249-4745

P.O. Box 39
Nucla, CO 81424
970-864-7319, Fax No. 970-864-7310

PH Nurse

Ann Hemme

970-864-7319

308 Main St., Ste # 208
Olathe, CO 81425
970-323-5078, Fax No. 970-323-5483

MORGAN COUNTY

NORTHEAST COLORADO HEALTH DEPT
700 Columbine Street
Sterling, CO 80751
970-522-3741, Fax No. 970-522-1412

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:

Denise Hase
Laura Jorstad*
Rob Witt
Joy Vondy-Butt

970-522-3741x120
970-522-3741x117
970-522-3741x122
970-522-3741x150

OTERO COUNTY

OTERO COUNTY HEALTH DEPT
13 West Third Street Room
La Junta, CO 81050
719-383-3040, Fax No. 719-383-3060

Director:
Bus Mgr:
Env Hlth Dir.
Hlth Educ:
Nurs Dir:

Roger Stasiak*
Alice Lucero
Christy Bowman, REHS
Aaron Martinez
Lorene Nelson

719-383-3045
719-383-3044
719-383-3053
719-383-3054
719-383-3047

OURAY COUNTY

OURAY CO PH NURSING SERVICE
Bin C, Courthouse
Ouray, CO 81427-0615
970-325-4670, Fax No. 970-325-4387

PH Nurse
Hlth Officer

Cheryl Roberts
Patty Ammon, MD

970-325-4673
970-626-5123

PARK COUNTY

PARK CO PH NURSING SERVICE
P.O. Box 983
Bailey, CO 80421-0983
303-838-7653, Fax No. 303-838-5578

PH Nurse
Hlth Officer

Vicki Garrett
Ted Villavicencio, MD

303-838-7653
303-838-4686

P.O. Box 1465
Fairplay, CO 80440
719-836-4161, Fax No. 719-836-0508

PH Nurse

Beth Swanson

719-836-4161

PARK COUNTY ENV HEALTH DEPT
P.O. Box 216
Fairplay, CO 80440
719-836-4257x267, Fax No. 719-836-4275

Env Hlth Officer

Don Bantam

719-836-4257x267

PHILLIPS COUNTY

NORTHEAST COLORADO HEALTH DEPT
700 Columbine Street
Sterling, CO 80751
970-522-3741, Fax No. 970-522-1412

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:

Denise Hase
Laura Jorstad*
Rob Witt
Joy Vondy-Butt

970-522-3741x120
970-522-3741x117
970-522-3741x122
970-522-3741x150

PITKIN COUNTY

PITKIN CO PH NURSING SERVICE
0405 Castle Creek Rd., Suite 6
Aspen, CO 81611
970-920-5420, Fax No. 970-920-5419

PH Nurse
Hlth Officer

Yvonne Hernandez
James Patrick, MD

970-920-5420
970-920-5420

PITKIN CO ENV HEALTH DEPT
130 S. Galena
Aspen, CO 81611
970-920-5070, Fax No. 970-920-5074

Env Hlth Officer

Tom Dunlop

970-920-5070

PROWERS COUNTY

PROWERS CO PH NURSING SERVICE
1001 South Main Street
Lamar, CO 81052-3838
719-336-8721, Fax No. 719-336-9763

PH Nurse
Hlth Officer

Jackie Brown
Ousama Ghaibeh, MD

719-336-8721
719-336-2291

PROWERS COUNTY ENV HEALTH DEPT
Southeastern Region
1006 S. 4th Street
Lamar, CO 81052
719-336-8988, Fax No. 719-336-8989

Env Hlth Officer

Monte Torres

719-336-8721x27

PUEBLO COUNTY

PUEBLO CITY-COUNTY HEALTH
DEPARTMENT
151 Central Main Street
Pueblo, CO 81003
719-583-4300, Fax No. 719-583-4524
Dr. Nevin-Woods Fax No. 710-583-4554

Director:
Dep Dir:

Christine Nevin-Woods, MD
Dutch Gruse*
Env Hlth Dir: Heather Maio
Fam & Com Hlth Dir: Gerri Alfonso
Microbiologist: Jim Simony
Pub Rel: Cathy Dehn

719-583-4513
719-583-4511
719-583-4321
719-583-4334
719-583-4317
719-583-4315

RIO BLANCO COUNTY

RIO BLANCO CO PH NURSING SERVICE
209 East Main, #103
Rangely, CO 81648
970-675-8866, Fax No. 970-675-8250

PH Nurse

Diane Banta

970-675-8866

P.O. Box 1206
Meeker, CO 81641
970-878-4003, Fax No. 970-878-4004

PH Nurse

Beth Merriam

970-878-4003

RIO GRANDE COUNTY

RIO GRANDE CO PH NURSING SERVICE
925 Sixth Street, Room 101
Del Norte, CO 81132
719-657-3352, Fax No. 719-657-2514

PH Nurse

Patricia Perry

719-657-3352

ROUTT COUNTY

ROUTT CO PH NURSING SERVICE
P.O. Box 770417
Steamboat Springs, CO 80477
970-879-1632, Fax No. 970-870-1326

PH Nurse
Hlth Officer

Susan Birch
Dan Smilkstein, MD

970-879-1632
970-879-1632

P.O. Box 10
150 Jackson Ave
Hayden, CO 81639
970-276-3512

Community Building
P.O. Box 566
Oak Creek, CO 80467
970-736-2412

ROUTT COUNTY ENV HEALTH DEPT Env Hlth Officer P.O. Box 770087, 136 - 6th Street Routt County Courthouse Steamboat Springs, CO 80477 970-879-0185, Fax No. 970-879-3992	Mike Zopf	970-879-0185
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SAGUACHE COUNTY

SAGUACHE CO PH NURSING SERVICE P.O. Box 336 Center, CO 81125 719-754-2773, Fax No. 719-754-2392	PH Nurse	Diane Jordan	719-754-2773
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P.O. Box 68 Saguache, CO 81149 719-655-2533, Fax No. 719-655-0105	PH Nurse	Sandy Weiss	719-655-2533
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SAN JUAN COUNTY

SAN JUAN BASIN HEALTH DEPT P.O. Box 140 Durango, CO 81302 970-247-5702, Fax No. 970-247-9126	Director: Adm Dir: Env Hlth Dir: Nurs Dir:	Lynn Westberg Helene Warren* Pat Shepherd Deb Banton	970-247-5702 970-247-5702 970-247-5702 970-247-5702
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SAN JUAN CO PH NURSING SERVICE P.O. Box 619 Silverton, CO 81433-0619 970-387-5544 (A.M.-School) 970-387-0242, Fax No. 970-387-5791	PH Nurse	Loretta St. George	970-387-0242
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SAN MIGUEL COUNTY

SAN MIGUEL CO PH NURSING SERVICE P.O. Box 949, Courthouse Telluride, CO 81435-9999 970-728-4289, Fax No. 970-728-3718	PH Nurse Hlth Officer	June Nepsky David Homer, MD	970-728-4289 970-728-6654
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P.O. Box 496 Norwood, CO 81423-0496 970-327-4543, Fax No. 970-327-4090	PH Nurse	June Nepsky	970-728-4543
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SAN MIGUEL CO ENV HEALTH DEPT Env Hlth Officer P.O. Box 4130 Telluride, CO 81435 970-728-0447, Fax No. 970-728-6325	Dave Schneck	970-728-0447
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SEDGWICK COUNTY

NORTHEAST COLORADO HEALTH DEPT 700 Columbine Street Sterling, CO 80751 970-522-3741, Fax No. 970-522-1412	Director: Adm Dir: Env Hlth Dir: Nurs Dir:	Denise Hase Laura Jorstad* Rob Witt Joy Vondy-Butt	970-522-3741x120 970-522-3741x117 970-522-3741x122 970-522-3741x150
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SUMMIT COUNTY

SUMMIT CO PH NURSING SERVICE P.O. Box 2280 Frisco, CO 80443 970-668-5230, Fax No. 970-668-4115	PH Nurse Hlth Officer	Debby Crook Pat Duletsky	970-668-4181 970-668-5584
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SUMMIT COUNTY ENV HEALTH DEPT P.O. Box 5660 - 37 Summit County Rd #1005 Frisco, CO 80443 970-668-4070, Fax No. 970-668-4225	Env Hlth Officer	Jim Rada	970-668-4072
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TELLER COUNTY

TELLER CO PH NURSING SERVICE P.O. Box 5079 Woodland Park, CO 80866 719-687-1404, Fax No. 719-687-5256	Director	Karen O'Brien	719-687-5248
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TELLER CO ENV HEALTH DEPT P.O. Box 5079 Woodland Park, CO 80866 719-687-5250, Fax No. 719-687-5256	Env Hlth Officer	Tom Wood, MD	719-687-5250
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WASHINGTON COUNTY

NORTHEAST COLORADO HEALTH DEPT 700 Columbine Street Sterling, CO 80751 970-522-3741, Fax No. 970-522-1412	Director: Adm Dir: Env Hlth Dir: Nurs Dir:	Denise Hase Laura Jorstad* Rob Witt Joy Vondy-Butt	970-522-3741x120 970-522-3741x117 970-522-3741x122 970-522-3741x150
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WELD COUNTY

WELD COUNTY HEALTH DEPT 1555 N. 17th Avenue Greeley, CO 80631 970-304-6416	Director: Office Mgr: Env Hlth Prot: Public Health Hlth Educ: Nurs Dir:	John Pickle Judy Nero* Jeff Stoll Karen Spink Linda Carlson	970-304-6410x2104 970-304-6410x2122 970-304-6410 970-304-6410x2350 970-304-6420x2304
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YUMA COUNTY

NORTHEAST COLORADO HEALTH DEPT
700 Columbine Street
Sterling, CO 80751
970-522-3741, Fax No. 970-522-1412

Director:
Adm Dir:
Env Hlth Dir:
Nurs Dir:

Denise Hase
Laura Jorstad*
Rob Witt
Joy Vondy-Butt

970-522-3741x120
970-522-3741x117
970-522-3741x122
970-522-3741x150

* Contract Coordinator

Attachment 4 - 100-Year Flood Plain Certification

Instructions

- ▶ A Professional Engineer must complete the form and affix a signature and seal.

WATER QUALITY CONTROL DIVISION
WATER QUALITY PROTECTION SECTION
WQCD-TS-B2 - Technical Services Unit
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80222-1530
(303) 692-3500

PWSID # _____
(For Department Use)

100-YEAR FLOOD PLAIN CERTIFICATION

This Statement must accompany all Applications for Approval to Construct new Waterworks submitted to the Colorado Department of Public Health and Environment.

PROJECT TITLE _____ County _____

CONSULTANT _____

STATEMENT

I hereby certify that a Professional Engineering judgment has been made after evaluating all available flood plain data from the Colorado Water Conservation Board, U.S. Army Corps of Engineers, Housing and Urban Development, County Government, local flood districts, etc, regarding a potential 100-year flood threat to the

_____ Well or treatment plant

for _____

Name of entity or district, etc.

In my opinion, these waterworks, as located and designed, are not subject to flood damage by a 100-year event, based on the information enclosed from the

Signature _____ Title _____ Date _____

A Professional Engineers's Stamp must be included for all Community Water System's. Affix stamp below.



Date _____

Attachment 5 - Inventory Form

Instructions

- ▶ This form will be used to update the database system at the Department.
- ▶ Complete a treatment form for each source in your water system.
- ▶ Sign the form.

WATER QUALITY CONTROL DIVISION
WATER QUALITY PROTECTION SECTION
COMPLIANCE MONITORING AND DATA MANAGEMENT UNIT
WQCD-CMDM-B2
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80222-1530
(303) 692-3500

PWSID # _____
(For Department Use)

PUBLIC DRINKING WATER SYSTEM INVENTORY FORM

Establishment Name _____

Establishment Location _____ County _____

Establishment Address _____

Establishment Phone _____ Do you provide food service? Yes _____ No _____

Type of Establishment (e.g. homes, business, school, factory, store, camp, church, lodge, campground, ski area, etc.)

Do you have a certified Water System Operator? Yes _____ No _____ Class/# _____

Certified Operator's Name _____ Operator Phone (____) _____

Owner's Name _____ Owners Phone (____) _____

Owner's Address _____

Water Source(s) (e.g. Well (include depth), spring, creek, reservoir, lake, purchased, etc.)

If you purchase water, name the system you purchase from _____

****Please complete the treatment information on the next page of this form.****

Is this a seasonal operation? Yes _____ No _____ If yes: Date Open _____ Date Closed _____

Indicate the approximate number of each (per day) for our records: (record the maximum, DO NOT AVERAGE)

_____ Residents, year round _____ Resident, seasonal _____ Students

_____ Church/Club Members _____ Day Care Children _____ Employees

_____ Visitors/Customers/Guests

Other, please specify _____

Print name of person completing this form _____

Signature _____ Title _____ Date _____

Please copy this form for EACH source of water your system has available for use.

Establishment Name _____

Name of Water Source _____ County _____

Longitude of this Source _____ Latitude of this Source _____

How was Lat./Long. Determined? _____ Lat./Long. Date _____

Check those treatments that apply to this source only.

____ No treatment applied

DISINFECTION

- ____ Gaseous Chlorination, Post
- ____ Gaseous Chlorination, Pre
- ____ Hypochlorination, Bleach, Post
- ____ Hypochlorination, Bleach, Pre
- ____ Chloramines
- ____ Chlorine Dioxide

- ____ Ozonation, Post
- ____ Ozonation, Pre

- ____ Ultraviolet Irradiation

- ____ Bone Char
- ____ Distillation
- ____ Fluoridation

- ____ Inhibitor, Bimetallic Phosphate
- ____ Inhibitor, Hexametaphosphate
- ____ Inhibitor, Orthophosphate
- ____ Inhibitor, Polyphosphate
- ____ Inhibitor, Silicate
- ____ Ion Exchange

- ____ Lime - Soda Ash addition

FILTRATION

- ____ Coagulation
- ____ Rapid Mix
- ____ Flocculation
- ____ Sedimentation
- ____ Filtration, Rapid Sand
- ____ Filtration, Bag
- ____ Filtration, Cartridge
- ____ Filtration, Diatomaceous Earth
- ____ Filtration, Greensand
- ____ Filtration, Pressure Sand
- ____ Filtration, Slow Sand
- ____ Filtration, Ultra Filtration
- ____ Ultrafiltration (Membranes)
- ____ Nanofiltration (Membranes)

- ____ pH Adjustment
- ____ pH Adjustment, Pre
- ____ pH Adjustment, Post
- ____ Permanganate
- ____ Peroxide

- ____ Reducing Agent, Sodium Bisulfate
- ____ Reducing Agent, Sodium Sulfite
- ____ Reducing Agent, Sulfur Dioxide
- ____ Reducing Agent
- ____ Reverse Osmosis

- ____ Sequestration
- ____ Sludge Treatment

OTHER FORMS OF TREATMENT

- ____ Activated Alumina
- ____ Activated Carbon, Granular
- ____ Activated Carbon, Powdered
- ____ Aeration (Type)
- ____ Algae Control

Comments: _____

Attachment 6 - Chemical/MPA Analysis State Reporting Forms

Instructions

- ▶ Submit one copy of a raw water chemical analysis from a certified lab on the Chemical Analysis State Reporting Forms.
- ▶ Community Water Systems and Non-Transient Non-Community water systems are required to submit results for inorganic chemicals, nitrate, nitrite, sodium, corrosivity (temperature, pH, alkalinity, calcium, and total dissolved solids or conductivity), radioactivity, and Phase I, II, and V organic chemicals.
- ▶ Transient non-community system are required to submit bacteriological, nitrate, and nitrite.
- ▶ Samples must have been collected within the last three years.

**Colorado Department of Public Health and Environment
Compliance Monitoring & Data Management Unit
REPORTING FORM FOR ORIGINAL, PHASE II, V INORGANIC ANALYSES**

SAMPLER: PLEASE FILL OUT ONE FORM - FOR EACH INDIVIDUAL SOURCE/PLANT or COMPOSITE SET

YES [] or NO [] THESE RESULTS ARE TO BE USED TO FULFILL **STATE** SAMPLING REQUIREMENTS
**** *INSTRUCTIONS/DEFINITIONS ON BACK OF FORM* ****

PWSID #: _____ COUNTY: _____ DATE COLLECTED: ____ / ____ / ____

SYSTEM/ESTABLISHMENT NAME: _____

SYSTEM ADDRESS: _____
Street address/PO Box CITY STATE ZIP

CONTACT PERSON: _____ PHONE: (____) _____

SAMPLE COLLECTED BY: _____ TIME COLLECTED: _____ am/pm

WATER TYPE: RAW (No chlorine or other treatment) [] or CHLORINATED [] or OTHER TREATMENT []

SOURCE(S): LOCATION(S): - Address SAMPLE POINT(S):

(SEE BACK OF FORM)

DO SAMPLES NEED TO BE COMPOSITED BY LABORATORY ? YES [] or NO []

For Laboratory Use Only Below This Line

LABORATORY SAMPLE # _____ CLIENT NAME or ID# _____

LABORATORY NAME _____ LAB PHONE # (____) _____

DATE RECEIVED IN LABORATORY ____ / ____ / ____ DATE ANALYZED ____ / ____ / ____

COMMENTS _____

<u>PARAMETER</u>	<u>(mg/l) RESULT</u>	<u>(mg/l) MCL</u>	<u>EPA METHOD</u>	<u>(mg/l) Lab MDL</u>
ANTIMONY	_____	0.006	_____	_____
ARSENIC	_____	0.05	_____	_____
BARIUM	_____	2.0	_____	_____
BERYLLIUM	_____	0.004	_____	_____
CADMIUM	_____	0.005	_____	_____
CHROMIUM	_____	0.1	_____	_____
COPPER	_____	1.3*	_____	_____
CYANIDE	_____	0.2	_____	_____
FLUORIDE	_____	4.0	_____	_____
LEAD	_____	0.015*	_____	_____
MERCURY	_____	0.002	_____	_____
NICKEL	_____	0.1	_____	_____
SELENIUM	_____	0.05	_____	_____
SODIUM	_____	**	_____	_____
SULFATE	_____	500.0**	_____	_____
THALLIUM	_____	0.002	_____	_____

BDL = Indicates that the compound was analyzed for, but was **below the Lab MDL**.
NT = Not Tested for Compound
mg/L = Milligrams per Liter
MCL = Maximum Contaminant Level
Lab MDL = Laboratory Method Detection Limit

* = NOT an MCL, "Action Level"
** = NOT an MCL, "Monitoring Requirement Only"
H = Holding time has been exceeded

Reviewed & Approved by _____ Title _____ Date ____ / ____ / ____

MAIL RESULTS TO: Colorado Department of Public Health and Environment, WQCD-CMDM-B2, 4300 Cherry Creek Drive South, Denver, CO 80246-1530
Revised 12/97 - J:\WP\LABFORMS\INORGAN.FRM

LIST OF EXPLANATIONS FOR OTHER SIDE

Please **complete, fully**, the upper portion of the "**REPORTING FORM FOR ... ANALYSIS**" and submit this with each set of the filled sample bottles. **LABEL ALL BOTTLES** correctly and completely and **MAKE SURE** they are described the same way on the PAPERWORK.

PWSID#: - If you do NOT know your Public Water System ID#, please call your Drinking Water Compliance Officer in the Drinking Water Program (303) 692-3500.

WATER TYPE: - All samples should be taken **after** CHLORINATION and/or other treatment whenever possible. The reason for the test is to know the quality of the water people are actually drinking.

SOURCE / LOCATION / SAMPLE POINT: - indicate which source this sample is for:

DO NOT take your sample in the **DISTRIBUTION SYSTEM** - (i.e. Your house, the Town Hall, etc. are NOT sources. If you sample at this type of sample point you will be required to sample again, at the actual sources.)

- A. You must sample EACH SOURCE SEPARATELY. Remember, sampling points are always AFTER TREATMENT and AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM. EXCEPTION by special permission from your Compliance Officer: First available tap nearest treatment point, i.e. first building.**
- B. If you do NOT have a sampling tap at the correct point, then you should try to make arrangements to install one.**
- C. If ALL or PART of the SOURCES are BLENDED BEFORE TREATMENT, you can then sample these AT THE ENTRY POINT to the DISTRIBUTION SYSTEM.**

TYPES OF SOURCES: Well, Spring, Infiltration Gallery, Cistern, Tank, Water Treatment Plant (WTP), Blending Tank, Storage Tank, Vending Machine, Hauled Water Tank

EXAMPLES of what to WRITE:

<u>SOURCE(S)</u>	<u>LOCATION(S)-Address</u>	<u>SAMPLING POINT(S)</u>
Well #1	1515 J Street	Well head after treatment
North spring & South spring	Near CR 46	Spring Box where North Spring and South Spring blend
Wells CR-5,BG-6,H-2	North well Field	Blending Tank for all 3 wells after chlorination
Colorado River & well #14	7510 Jackson St.	Clearwell (or entry to distribution) at Smith Water Treatment Plant
Inf. Gal. on Spring Creek	Near CR 10	Sampling Tap after filtration/chlorination & before distribution
Golf Course well	1517 Fox Street	Pumphouse after treatment

- A.** Always give name, number or description that **you** have assigned to a source.
- B.** Always give street address nearest to the source - if applicable
- C.** If several sources go to a tank before entering the distribution system - the tank is the sampling point, but you must clearly indicate that you sampled at the tank. **EXAMPLE:** Tank #1 for wells CR-3, CD-2, EF-5 and RP-1

IF COMPOSITING please describe all sources being composited. Include PWSID#s if more than one system/establishment is compositing together. Systems with a population **greater than 3,300** may NOT composite with any other systems.

COMPOSITING:

The regulations **allow the LABORATORY**, at your request, to composite more than one source, into one sample. (See below). You must indicate that you want the laboratory to do this **for you**. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.

Up to **FIVE (5) sets of samples** can be composited for: Inorganics
Nitrate/Nitrite
Radiological

Up to **TWO (2) sets of samples** can be composited for: Organics

Check samples CANNOT be composited!

IF a set of sample results represent more than one source and a contaminant is detected, you may be required to take CHECK SAMPLES. If CHECK SAMPLES are needed, each source must be sampled and analyzed separately.

If you have an unusual situation that we have not covered in these instructions, or you have other sampling questions please call (303) 692-3500 and ask to speak to your Drinking Water Compliance Officer.

LIST OF EXPLANATIONS FOR OTHER SIDE

**** DO NOT SAMPLE THROUGH HOSES OR SCREENS ****

Please complete, fully, the upper portion of the "REPORTING FORM FOR ... ANALYSIS" and submit this with each set of the filled sample bottles. LABEL ALL BOTTLES correctly and completely and MAKE SURE they are described the same way on the PAPERWORK.

PWSID#: - If you do NOT know your Public Water System ID#, please call your Drinking Water Compliance Officer in the Drinking Water Program (303) 692-3500.

WATER TYPE: - All samples should be taken after CHLORINATION and/or other treatment whenever possible. The reason for the test is to know the quality of the water people are actually drinking.

SOURCE / LOCATION / SAMPLE POINT: - indicate which source this sample is for:

DO NOT take your sample in the DISTRIBUTION SYSTEM - (i.e. Your house, the Town Hall, etc. are NOT sources. If you sample at this type of sample point you will be required to sample again, at the actual sources.)

- A. You must sample EACH SOURCE SEPARATELY. Remember, sampling points are always AFTER TREATMENT and AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM. EXCEPTION by special permission from your Compliance Officer: First available tap nearest treatment point, i.e. first building.
- B. If you do NOT have a sampling tap at the correct point, then you should try to make arrangements to install one.
- C. If ALL or PART of the SOURCES are BLENDED BEFORE TREATMENT, you can then sample these AT THE ENTRY POINT to the DISTRIBUTION SYSTEM.

TYPES OF SOURCES: Well, Spring, Infiltration Gallery, Cistern, Tank, Water Treatment Plant (WTP), Blending Tank, Storage Tank, Vending Machine, Hauled Water Tank

EXAMPLES of what to WRITE:

<u>SOURCE(S)</u>	<u>LOCATION(S)-Address</u>	<u>SAMPLING POINTS(S)</u>
Well #1	1515 J Street	Well head after treatment
North spring & South spring	Near CR 46	Spring Box where North Spring and South Spring blend
Wells CR-5,BG-6,H-2	North well Field	Blending Tank for all 3 wells after chlorination
Colorado River & well #14	7510 Jackson St.	Clearwell (or entry to distribution) at Smith Water Treatment Plant
Inf. Gal. on Spring Creek	Near CR 10	Sampling Tap after filtration/chlorination & before distribution
Golf Course well	1517 Fox Street	Pumphouse after treatment

- A. Always give name, number or description that you have assigned to a source.
- B. Always give street address nearest to the source - if applicable
- C. If several sources go to a tank before entering the distribution system - the tank is the sampling point, but you must clearly indicate that you sampled at the tank. EXAMPLE: Tank #1 for wells CR-3, CD-2, EF-5 and RP-1

IF COMPOSITING please describe all sources being composited. Include PWSID#s if more than one system/establishment is compositing together. Systems with a population greater than 3,300 may NOT composite with any other systems.

COMPOSITING:

The regulations allow the LABORATORY, at your request, to composite more than one source, into one sample. (See below). You must indicate that you want the laboratory to do this for you. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.

Up to FIVE (5) sets of samples can be composited for: Inorganics
Nitrate/Nitrite
Radiological

Up to TWO (2) sets of samples can be composited for: Organics

Checksamples CANNOT be composited!

IF a set of sample results represent more than one source and a contaminant is detected, you may be required to take CHECK SAMPLES. If CHECK SAMPLES are needed, each source must be sampled and analyzed separately.

If you have an unusual situation that we have not covered in these instructions, or you have other sampling questions please call (303) 692-3500 and ask to speak to your Drinking Water Compliance Officer.

Revised 6/94 - J:\WP\LABFORMS\BACK_OF.FRM

Colorado Department of Public Health and Environment
Compliance Monitoring & Data Management Unit

REPORTING FORM FOR PHASE I,II,V ORGANIC ANALYSES

SAMPLER: PLEASE FILL OUT ONE FORM - FOR EACH INDIVIDUAL SOURCE/PLANT or COMPOSITE SET
YES [] or NO [] THESE RESULTS ARE TO BE USED TO FULFILL **STATE** SAMPLING REQUIREMENTS

**** *INSTRUCTIONS/DEFINITIONS ON BACK OF FORM* ****

PWSID #: _____ COUNTY: _____ DATE COLLECTED: ____ / ____ / ____

SYSTEM/ESTABLISHMENT NAME: _____

SYSTEM ADDRESS: _____
Street address/PO Box CITY STATE ZIP

CONTACT PERSON: _____ PHONE: (____) _____

SAMPLE COLLECTED BY: _____ TIME COLLECTED: _____ am/pm

WATER TYPE: RAW (No chlorine or other treatment) [] or CHLORINATED [] or OTHER TREATMENT []

SOURCE(S): LOCATION(S): - Address SAMPLE POINT(S):

(SEE BACK OF FORM)

DO SAMPLES NEED TO BE COMPOSITED BY LABORATORY ? YES [] or NO []

If yes, record information for second source or second PWSID# _____

SOURCE(S): LOCATION(S): - Address SAMPLE POINT(S):

(SEE BACK OF FORM)

===== *For Laboratory Use Only Below This Line* =====

LABORATORY SAMPLE #: _____ CLIENT NAME or ID#: _____

LABORATORY NAME: _____ LAB PHONE #: (____) _____

DATE RECEIVED IN LABORATORY: ____ / ____ / ____ DATE ANALYZED: ____ / ____ / ____

COMMENTS: _____

UNREGULATED VOCs (TRICHALOMETHANES):

These THM results do NOT count as the regulated THM results for systems serving greater than 10,000 population.

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
Chloroform	67-66-3	_____	_____	_____	_____
Bromodichloromethane	75-27-4	_____	_____	_____	_____
Chlorodibromomethane	124-48-1	_____	_____	_____	_____
Bromoform	75-25-2	_____	_____	_____	_____

REGULATED PHASE I ORGANIC CHEMICALS--VOCs

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>(ug/l) MCL</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
1,1-Dichloroethylene	75-35-4	_____	7	_____	_____	_____
1,1,1-Trichloroethane	71-55-6	_____	200	_____	_____	_____
1,1,2-Trichloroethane	79-00-5	_____	5	_____	_____	_____
1,2,-Dichloroethane	107-06-2	_____	5	_____	_____	_____
1,2,-Dichloropropane	78-87-5	_____	5	_____	_____	_____
1,2,4-Trichlorobenzene	120-82-1	_____	70	_____	_____	_____
Benzene	71-43-2	_____	5	_____	_____	_____
Carbon tetrachloride	56-23-5	_____	5	_____	_____	_____
cis-1,2-Dichloroethylene	156-59-2	_____	70	_____	_____	_____
Dichloromethane	75-09-2	_____	5	_____	_____	_____
Ethylbenzene	100-41-4	_____	700	_____	_____	_____
Monochlorobenzene	108-90-7	_____	100	_____	_____	_____
o-Dichlorobenzene	95-50-1	_____	600	_____	_____	_____
para-Dichlorobenzene	106-46-7	_____	75	_____	_____	_____
Styrene	100-42-5	_____	100	_____	_____	_____
Tetrachloroethylene	127-18-4	_____	5	_____	_____	_____
Toluene	108-88-3	_____	1,000	_____	_____	_____
trans-1,2-Dichloroethylene	156-60-5	_____	100	_____	_____	_____
Trichloroethylene	79-01-6	_____	5	_____	_____	_____
Vinyl chloride	75-01-4	_____	2	_____	_____	_____
Xylenes (total)	1330-20-7	_____	10,000	_____	_____	_____

REGULATED PHASE II/V ORGANIC CHEMICALS--SOCs

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>(ug/l) MCL</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
Dioxin	1746-01-6	_____	0.00003	_____	_____	_____
2,4,-D	94-75-7	_____	70	_____	_____	_____
2,4,5,-TP	93-72-1	_____	50	_____	_____	_____
Alachlor	15972-60-8	_____	2	_____	_____	_____
Atrazine	1912-24-9	_____	3	_____	_____	_____
Benzo(a)pyrene	50-32-8	_____	0.2	_____	_____	_____
Carbofuran	1563-66-2	_____	40	_____	_____	_____
Chlordane	57-74-9	_____	2	_____	_____	_____
Dalapon	75-99-0	_____	200	_____	_____	_____
Dibromochloropropane	96-12-8	_____	0.2	_____	_____	_____
Dinoseb	85-85-7	_____	7	_____	_____	_____
Diquat	85-00-7	_____	20	_____	_____	_____

REGULATED PHASE II/V ORGANIC CHEMICALS--SOCs (CONT.)

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>(ug/l) MCL</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
Di(2-ethylhexyl)adipate	103-23-1	_____	400	_____	_____	_____
Di(2-ethylhexyl)phthalate	117-81-7	_____	6	_____	_____	_____
Endothall	145-73-3	_____	100	_____	_____	_____
Endrin	72-20-8	_____	2	_____	_____	_____
Ethylene dibromide	106-93-4	_____	0.05	_____	_____	_____
Glyphosate	1071-83-6	_____	700	_____	_____	_____
Heptachlor	76-44-8	_____	0.4	_____	_____	_____
Heptachlor epoxide	1024-57-3	_____	0.2	_____	_____	_____
Hexachlorobenzene	118-74-1	_____	1	_____	_____	_____
Hexachlorocyclopentadiene	77-47-4	_____	50	_____	_____	_____
Lindane	58-89-9	_____	0.2	_____	_____	_____
Methoxychlor	72-43-5	_____	40	_____	_____	_____
Oxamyl	23135-22-0	_____	200	_____	_____	_____
Pentachlorophenol	87-86-5	_____	1	_____	_____	_____
Picloram	1918-02-1	_____	500	_____	_____	_____
Polychlorinated biphenyl's	1336-36-3	_____	0.5	_____	_____	_____
Simazine	122-34-9	_____	4	_____	_____	_____
Toxaphene	8001-35-2	_____	3	_____	_____	_____

UNREGULATED ORGANIC CHEMICALS--SOCs

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
3-Hydroxycarbofuran	(Unk)	_____	_____	_____	_____
Aldicarb	116-06-3	_____	_____	_____	_____
Aldicarb sulfone	1646-88-4	_____	_____	_____	_____
Aldicarb sulfoxide	1646-87-3	_____	_____	_____	_____
Aldrin	309-00-2	_____	_____	_____	_____
Butachlor	23184-66-9	_____	_____	_____	_____
Carbaryl	63-25-2	_____	_____	_____	_____
Dicamba	1918-00-9	_____	_____	_____	_____
Dieldrin	60-57-1	_____	_____	_____	_____
Methomyl	16752-77-5	_____	_____	_____	_____
Metolachlor	51218-45-2	_____	_____	_____	_____
Metribuzin	21087-64-9	_____	_____	_____	_____
Propachlor	1918-16-7	_____	_____	_____	_____

UNREGULATED ORGANIC CHEMICALS--VOCs

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
1,1-Dichloroethane	75-34-3	_____	_____	_____	_____
1,1-Dichloropropene	563-58-6	_____	_____	_____	_____
1,1,1,2-Tetrachloroethane	630-20-6	_____	_____	_____	_____
1,1,2,2-Tetrachloroethane	79-34-5	_____	_____	_____	_____
1,2,3-Trichlorobenzene	87-61-6	_____	_____	_____	_____
1,2,3,-Trichloropropane	96-18-4	_____	_____	_____	_____

UNREGULATED ORGANIC CHEMICALS--VOCs (CONT.)

<u>CONTAMINANT</u>	<u>CAS#</u>	<u>(ug/l) RESULT</u>	<u>EPA METHOD</u>	<u>(ug/l) Lab MDL</u>	<u>(ug/l) BLANK RESULT</u>
1,2,4-Trimethylbenzene	95-63-6	_____	_____	_____	_____
1,3-Dichloropropane	142-28-9	_____	_____	_____	_____
1,3-Dichloropropene	542 -75-6	_____	_____	_____	_____
1,3,5-Trimethylbenzene	108-67-8	_____	_____	_____	_____
2,2-Dichloropropane	590-20-7	_____	_____	_____	_____
Bromobenzene	108-86-1	_____	_____	_____	_____
Bromochloromethane	74-97-5	_____	_____	_____	_____
Bromomethane	74-83-9	_____	_____	_____	_____
Chloroethane	75-00-3	_____	_____	_____	_____
Chloromethane	74-87-3	_____	_____	_____	_____
Dibromomethane	74-95-3	_____	_____	_____	_____
Dichlorodifluoromethane	75-71-8	_____	_____	_____	_____
Fluorotrichloromethane	75-69-4	_____	_____	_____	_____
Hexachlorobutadiene	87-68-3	_____	_____	_____	_____
Isopropylbenzene	98-82-8	_____	_____	_____	_____
m-Dichlorobenzene	541-73-1	_____	_____	_____	_____
Naphthalene	91-20-3	_____	_____	_____	_____
n-Butylbenzene	104-51-8	_____	_____	_____	_____
n-Propylbenzene	103-65-1	_____	_____	_____	_____
o-Chlorotoluene	95-49-8	_____	_____	_____	_____
p-Chlorotoluene	106-43-4	_____	_____	_____	_____
p-Isopropyltoluene	99-87-6	_____	_____	_____	_____
Sec-butylbenzene	135-98-8	_____	_____	_____	_____
Tert-butylbenzene	98-06-6	_____	_____	_____	_____

Codes used:

- NT = Not tested for compound
- B = The analyte is found in the associated blank as well as in the sample
- ug/L = Micrograms per liter
- MCL = Maximum Contaminant Level
- BDL = Indicates that the compound was analyzed for, but was **below the Lab MDL**.
- Lab MDL = Laboratory Method Detection Limit
- J = Indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit and greater than the Lab MDL.
(Above the Lab MDL but below the PQL.)

_____/_____/_____
 Reviewed & Approved by Title Date

MAIL RESULTS TO: Colorado Department of Public Health and Environment, WQCD-CMDM-B2, 4300 Cherry Creek Drive South, Denver, CO 80246-1530
 Revised 4/98 - J:\WP\LABFORMS\ORGANIC.FRM

LIST OF EXPLANATIONS FOR OTHER SIDE

**** DO NOT SAMPLE THROUGH HOSES OR SCREENS ****

Please complete, fully, the upper portion of the "REPORTING FORM FOR ... ANALYSIS" and submit this with each set of the filled sample bottles.
LABEL ALL BOTTLES correctly and completely and MAKE SURE they are described the same way on the PAPERWORK.

PWSID#: - If you do NOT know your Public Water System ID#, please call your Drinking Water Compliance Officer in the Drinking Water Program (303) 692-3500.

WATER TYPE: - All samples should be taken **after** CHLORINATION and/or other treatment whenever possible. The reason for the test is to know the quality of the water people are actually drinking.

SOURCE / LOCATION / SAMPLE POINT: - indicate which source this sample is for:

DO NOT take your sample in the DISTRIBUTION SYSTEM - (i.e. Your house, the Town Hall, etc. are NOT sources. If you sample at this type of sample point you will be required to sample again, at the actual sources.)

- A. You must sample **EACH SOURCE SEPARATELY**. Remember, sampling points are always **AFTER TREATMENT** and **AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM**. **EXCEPTION** by special permission from your Compliance Officer: **First available tap nearest treatment point, i.e. first building.**
- B. If you do **NOT** have a sampling tap at the correct point, then you should try to make arrangements to install one.
- C. If **ALL** or **PART** of the **SOURCES** are **BLENDED BEFORE TREATMENT**, you can then sample these **AT THE ENTRY POINT** to the **DISTRIBUTION SYSTEM**.

TYPES OF SOURCES: Well, Spring, Infiltration Gallery, Cistern, Tank, Water Treatment Plant (WTP), Blending Tank, Storage Tank, Vending Machine, Hauled Water Tank

EXAMPLES of what to WRITE:

<u>SOURCE(S)</u>	<u>LOCATION(S)-Address</u>	<u>SAMPLING POINTS(S)</u>
Well #1	1515 J Street	Well head after treatment
North spring & South spring	Near CR 46	Spring Box where North Spring and South Spring blend
Wells CR-5,BG-6,H-2	North well Field	Blending Tank for all 3 wells after chlorination
Colorado River & well #14	7510 Jackson St.	Clearwell (or entry to distribution) at Smith Water Treatment Plant
Inf. Gal. on Spring Creek	Near CR 10	Sampling Tap after filtration/chlorination & before distribution
Golf Course well	1517 Fox Street	Pumphouse after treatment

- A. Always give name, number or description that **you** have assigned to a source.
- B. Always give street address nearest to the source - if applicable
- C. If several sources go to a tank **before** entering the distribution system - the tank is the sampling point, but you must clearly indicate that you sampled at the tank. **EXAMPLE:** Tank #1 for wells CR-3, CD-2, EF-5 and RP-1

IF COMPOSITING please describe all sources being composited. Include PWSID#s if more than one system/establishment is compositing together. Systems with a population **greater than 3,300** may NOT composite with any other systems.

COMPOSITING:

The regulations **allow the LABORATORY**, at your request, to composite more than one source, into one sample. (See below). You must indicate that you want the laboratory to do this **for you**. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.

Up to **FIVE (5) sets of samples** can be composited for: Inorganics
Nitrate/Nitrite
Radiological

Up to **TWO (2) sets of samples** can be composited for: Organics

Checksamples CANNOT be composited!

IF a set of sample results represent more than one source and a contaminant is detected, you may be required to take CHECK SAMPLES. If CHECK SAMPLES are needed, each source must be sampled and analyzed separately.

If you have an unusual situation that we have not covered in these instructions, or you have other sampling questions please call (303) 692-3500 and ask to speak to your Drinking Water Compliance Officer.

Colorado Department of Public Health and Environment - Compliance Montrg & Data Mngmnt Unit

REPORTING FORM FOR RADIOLOGICAL ANALYSES

SAMPLER: PLEASE FILL OUT ONE FORM - FOR EACH INDIVIDUAL SOURCE/PLANT or COMPOSITE SET
YES [] or NO [] THESE RESULTS ARE TO BE USED TO FULFILL **STATE** SAMPLING REQUIREMENTS

**** **INSTRUCTIONS/DEFINITIONS ON BACK OF FORM** ****

PWSID #: _____ COUNTY: _____ DATE COLLECTED: ____ / ____ / ____

SYSTEM/ESTABLISHMENT NAME: _____

SYSTEM ADDRESS: _____
Street address/PO Box CITY STATE ZIP

CONTACT PERSON: _____ PHONE: (____) _____

SAMPLE COLLECTED BY: _____ TIME COLLECTED: _____ am/pm

WATER TYPE: RAW (No chlorine or other treatment) [] or CHLORINATED [] or OTHER TREATMENT []

SOURCE(S): LOCATION(S) - Address SAMPLE POINT(S):

 (SEE BACK OF FORM)

DO SAMPLES NEED TO BE COMPOSITED BY LABORATORY ? YES [] or NO []

_____ *For Laboratory Use Only Below This Line* _____

LABORATORY SAMPLE # _____ CLIENT NAME or ID# _____

LABORATORY NAME _____ LAB PHONE # (____) _____

DATE RECEIVED IN LABORATORY ____ / ____ / ____ DATE ANALYZED ____ / ____ / ____

COMMENTS _____

PARAMETER	(pCi/l) RESULT	(pCi/l) MCL	EPA METHOD	(pCi/l) Lab MDL
GROSS ALPHA	_____	SEE BELOW	_____	_____
GROSS BETA	_____	50	_____	_____
TOTAL SOLIDS, mg/L	_____	N/A	_____	_____
RADIUM 226	_____	*	_____	_____
RADIUM 228	_____	*	_____	_____
URANIUM	_____	**	_____	_____
RADON	_____	**	_____	_____
ADJUSTED ALPHA	_____	15***	_____	_____

COMMENT: _____

BDL = Indicates that the compound was analyzed for, but was **below the Lab MDL**.
 NT = Not Tested for compound
 mg/L = Milligrams per Liter
 MCL = Maximum Contaminant Level
 * = MCL for Radium 226 and 228 COMBINED is 5 pCi/L
 *** = Gross Alpha minus Uranium equals Adjusted Alpha
 N/A = Not Applicable
 pCi/L = PicoCuries per Liter
 Lab MDL = Laboratory Method Detection Limit
 ** = MCL in the process of being set by EPA

IF THE GROSS ALPHA EXCEEDS 10pCi/ THE SAME OR EQUIVALENT SAMPLE SHALL BE ANALYZED FOR RADIUM-226. IF THE RADIUM-226 EXCEEDS 3pCi, THE SAME OR AN EQUIVALENT SAMPLE SHALL BE ANALYZED FOR RADIUM-228. IF THE GROSS ALPHA EXCEEDS 15pCi THE SAME OR EQUIVALENT SAMPLE SHALL BE ANALYZED FOR URANIUM.

 Reviewed & Approved by Title Date

MAIL RESULTS TO: Colorado Department of Public Health and Environment, WQCD-CMDM-B2, 4300 Cherry Creek Drive South, Denver, CO 80246-1530
 Revised 3/99 EK - J:\WP\LABFORMS\RAD_LAB.FRM

LIST OF EXPLANATIONS FOR OTHER SIDE

Please complete, fully, the upper portion of the "REPORTING FORM FOR ... ANALYSIS" and submit this with each set of the filled sample bottles. LABEL ALL BOTTLES correctly and completely and MAKE SURE they are described the same way on the PAPERWORK.

PWSID#: - If you do NOT know your Public Water System ID#, please call your Drinking Water Compliance Officer in the Compliance Monitoring and Data Management Unit (303) 692-3500.

WATER TYPE: - All samples should be taken **after** CHLORINATION and/or other treatment whenever possible. The reason for the test is to know the quality of the water people are actually drinking.

SOURCE / LOCATION / SAMPLE POINT: - indicate which source this sample is for:

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- A. You must sample EACH SOURCE SEPARATELY. Remember, sampling points are always AFTER TREATMENT and AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM. EXCEPTION by special permission from your Compliance Officer: First available tap nearest treatment point, i.e. first building.
- B. If you do NOT have a sampling tap at the correct point, then you should try to make arrangements to install one.
- C. If ALL or PART of the SOURCES are BLENDED BEFORE TREATMENT, you can then sample these AT THE ENTRY POINT to the DISTRIBUTION SYSTEM.

TYPES OF SOURCES: Well, Spring, Infiltration Gallery, Cistern, Tank, Water Treatment Plant (WTP), Blending Tank, Storage Tank, Vending Machine, Hauled Water Tank

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COMPOSITING:

The regulations **allow the LABORATORY**, at your request, to composite more than one source, into one sample. (See below). You must indicate that you want the laboratory to do this **for you**. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.

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Radiological

Up to **TWO (2) sets of samples** can be composited for: Organics

Checksamples CANNOT be composited!

IF a set of sample results represent more than one source and a contaminant is detected, you may be required to take CHECK SAMPLES. If CHECK SAMPLES are needed, each source must be sampled and analyzed separately.

If you have an unusual situation that we have not covered in these instructions, or you have other sampling questions please call (303) 692-3500 and ask to speak to your Drinking Water Compliance Officer.

**Colorado Department of Public Health and Environment - Drinking Water Section
REPORTING FORM FOR MICROSCOPIC PARTICULATE ANALYSES (MPA)**

YES [] or NO [] THESE RESULTS ARE TO BE USED TO FULFILL **STATE** SAMPLING REQUIREMENTS

PWSID #: _____ COUNTY: _____ SAMPLE COLLECTED BY: _____

SYSTEM/ESTABLISHMENT NAME: _____

SYSTEM ADDRESS: _____
Street address/PO Box CITY STATE ZIP

DATE SAMPLE BEGAN: _____ DATE SAMPLE ENDED: _____ SAMPLE START
 TIME : _____ am/pm SAMPLE END TIME: _____ am/pm

PLEASE CHECK WATER TYPE: RAW [] FINISHED [] SURFACE [] GROUND []

SOURCE/WTP NAME: _____ QUANTITY SAMPLED _____ LITERS

_____ *For Laboratory Use Only Below This Line* _____

LABORATORY SAMPLE # _____ SAMPLE METHOD _____

LABORATORY NAME _____ LAB PHONE # () _____

DATE RECEIVED IN LABORATORY ____ / ____ / ____ DATE ANALYZED ____ / ____ / ____

MICROORGANISMS

RAW WATER
(Numbers per 100 gals)

FINISHED WATER
(Numbers per 100 L)

Cryptosporidium total IFA Count	_____	_____
Giardia total IFA Count	_____	_____
Nondiatomaceous Algae	_____	_____
Diatoms	_____	_____
Plant Debris	_____	_____
Rotifers	_____	_____
Nematodes	_____	_____
Pollen	_____	_____
Ameba	_____	_____
Ciliates	_____	_____
Colorless Flagellates	_____	_____
Crustaceans	_____	_____
Other Arthropods	_____	_____
Insects/larvae	_____	_____
Other	_____	_____
Giardia by Consensus Method	_____	_____
Coccidia by Consensus Method	_____	_____

EVALUATION

PERCENT REDUCTION

LOG REDUCTION

CENTRIFUGATE REMOVAL	_____	_____
MICROORGANISM REMOVAL	_____	_____
TURBIDITY, NTU	_____	_____
RISK LEVEL (Ground Water)	_____	

Reviewed & Approved by _____ Title _____ Date _____

MAIL RESULTS TO: Colorado Department of Public Health and Environment
 WQCD-CMDM ATTN: Erica Kannely
 4300 Cherry Creek Drive South, Denver, CO 80246-1530

REVISED 12/98 EK▶

▶

Attachment 7 - Financial Spreadsheet

Instructions

- ▶ The enclosed spreadsheet should be used to prepare the 5 year budget and other financial documentation.

Financial Spreadsheet

Applicant: _____
Completed by: _____
Date: _____

5 Year Projections	Current Year Budget Year 1 Projected	Year 2 Projected	Year 3 Projected	Year 4 Projected	Year 5 Projected
Enter Year:					
1. Beginning Cash on Hand					
2. Cash Receipts:					
a. Unmetered Water Revenue					
b. Metered Water Revenue					
c. Other Water Revenue					
d. Total Water Revenues (2a thru 2c)					
e. Connection Fees					
f. Interest and Dividend Income					
g. Other Income					
h. Total Cash Revenues (2d thru 2g)					
i. Transfers in/Additional Rev Needed					
j. Loans, Grants or other Cash Injection					
please specify					
3. Total Cash Receipts (2h thru 2j)					
4. Total Cash Available (1+3)					
5. Operating Expenses					
a. Salaries and wages					
b. Employee Pensions and Benefits					
c. Purchased Water					
d. Purchased Power					
e. Fuel for Power Production					
f. Chemicals					
g. Materials and Supplies					

Financial Spreadsheet

h. Contractual Services - Engineering					
i. Contractual Services - Other					
j. Rental of Equipment/Real Property					
k. Transportation Expenses					
l. Laboratory					
m. Insurance					
n. Regulatory Commission Expenses					
o. Advertising					
p. Miscellaneous					
q. Total Cash O&M Expenses (5a thru 5p)					
r. Replacement Expenditures					
s. Total OM&R Expenditures (5q+5r)					
t. Loan Principal/Capital Lease Payments					
u. Loan Interest Payments					
v. Transfers Out					
w. Capital Purchases (specify):					
x. Other					
6. Total Cash Paid Out (5s thru 5x)					
7. Ending Cash Position (4 - 6)					

Financial Spreadsheet

8. Number of Customer Accounts					
9. Average Annual User Charge per account (2d/8)					
10. Coverage Ratio (2h-5s)/(5t+5u)					
11. Operating Ratio (2d/5s)					
12. End of Year Operating Cash (7 - 13)					
13. End of Year Reserves:					
a. Debt Service Reserve					
b. Bond Retirement Reserve					
c. Capital Improvement Reserve					
d. Replacement Reserve					
e. Other					
Total Reserves (13a thru 13e)					

Financial Spreadsheet

Directions

1. Beginning Cash on Hand	For the prior period and the current year budget, use the actual cash balance. For all other years, cash on hand should equal item #12 from previous period.
2. Cash Receipts:	
a. Unmetered Water Revenue	All cash received/estimated for water supplied to residential, commercial, industrial and public customers where the customer charge is not based on quantity, i.e., its based on diameter of service pipe, room, foot of frontage or other type units.
b. Metered Water Revenue	all cash received/estimated for water supplied to residential, commercial, industrial and public customers where the charge is based on quantity of water delivered.
c. Other Water Revenue	Other cash received/estimated from sale of water, e.g., sales for irrigation, sales for resale, inter-municipal sales, advalorem taxes (OM&R portion) etc.
d. Total Water Revenues (2a thru 2c)	Self-explanatory
e. Connection Fees	All cash received/estimated for connection of customer service during the year.
f. Interest and Dividend Income	All cash received/estimated on interest income from securities, loans, notes, etc., whether the securities are carried as investments or included in sinking or reserve accounts.
g. Other Income	Other revenues collected/estimated during the period (e.g., disconnection or change in service fees, profit on materials billed to customers, servicing of customer lines, late payment fees, rents, sales of assets, advalorem taxes (infrastructure portion) etc.).
h. Total Cash Revenues (2d thru 2g)	Self-explanatory
i. Transfers in/Additional Rev Needed	Includes transfers from other funds w/i the municipality or can be used as a "plug" figure when determining the additional cash needed to cover cash needs.
j. Loans, Grants or other Cash Injection	Includes loans or grants from financial institutions, inter-municipal loans, state or federal sources.
3. Total Cash Receipts (2h thru 2j)	Self-explanatory
4. Total Cash Available (1+3)	Self-explanatory
5. Operating Expenses	Use actual amounts paid when completing the prior year. Estimate the amounts for projected years based on prior year amounts, trends and other known variables (including those related to needs identified in the self-assessment).
a. Salaries and wages	Cash expenditures made/estimated for salaries, bonuses and other consideration for work related to the O&M of the facility, including administration, and compensation for officers, directors, etc.
b. Employee Pensions and Benefits	Paid vacations, paid sick leave, health insurance, unemployment insurance, pension plan, etc.
c. Purchased Water	Amounts paid/estimated for cost of water purchased for resale.
d. Purchased Power	Amounts paid/estimated for all electrical power for the utility.
e. Fuel for Power Production	Amounts paid/estimated for fuel purchased for the production of power to operate pumps, etc.
f. Chemicals	Amounts paid/estimated for chemicals used in the treatment and distribution.
g. Materials and Supplies	Amounts paid/estimated for materials and supplies used for O&M of the PWS other than those under contractual services.
h. Contractual Services - Engineering	Amounts paid/estimated to outside engineers to perform ongoing engineering work for the facility.
i. Contractual Services - Other	Amounts paid/estimated for costs of outside accounting, legal, managerial, and other services.
j. Rental of Equipment/Real Property	Amounts paid/estimated for costs associated w/the rental of equipment, buildings and real property.
k. Transportation Expenses	Amounts paid/estimated for automobile, truck, equipment, and other vehicle use and maintenance.
l. Laboratory	Self-explanatory
m. Insurance	Amounts paid/estimated for vehicle, liability, workers' compensation and other insurance.
n. Regulatory Commission Expenses	Amounts paid/estimated for rate cases and other activities with a regulatory commission
o. Advertising	Amounts paid/estimated for informational, instructional and other advertising.
p. Miscellaneous	Amounts paid/estimated for all expenses not included elsewhere (e.g. permit fees, training, etc.).
q. Total Cash O&M Expenses (5a thru 5p)	Total of lines 5a thru 5p.
r. Replacement Expenditures	Amounts paid/estimated for replacement of equipment to maintain system integrity.
s. Total OM&R Expenditures (5q+r)	
t. Loan Principal/Capital Lease Payments	Include cash payments made/estimated for principal on all loans, including vehicle and equipment purchases on time payments and capital lease payments.
u. Loan Interest Payments	Self-explanatory
v. Transfers Out	Include cash transfers made/estimated to funds or entities outside the PWS.
w. Capital Purchases (specify):	Amount of cash outlays/estimates for items such as equipment, building, vehicle purchases, and leasehold improvements that were not a part of the initial design of the PWS infrastructure.
6. Total Cash Paid Out (5s thru 5x)	Self-explanatory
7. Ending Cash Position (4 - 6)	Self-explanatory
8. Number of Customer Accounts	Use most recent system data or expected increases.
9. Ave User Charge per Customer (2d/8)	Self-explanatory
10. Coverage Ratio (2h-5s)/(5t+5u)	Measure of the sufficiency of net operating profit to cover the debt service requirements of the system. A bond covenant might require this to meet or exceed certain limits (e.g. 1.25)
11. Operating Ratio (2d/5s)	Measure of whether operating revenues are sufficient to cover OM&R expenses. An operating ratio of 1.0 is the bare minimum for a self-supporting facility. With debt service requirements, the operating ratio would have to be higher.
12. End of Year Operating Cash (7 - 13)	All non-reserved cash.
13. End of Year Reserves:	Do not include depreciation as a reserve unless there is actually a "depreciation" reserve that has cash set-aside for future expansion.
a. Debt Service Reserve	Funds specifically set-aside to meet debt service requirements or requirements set forth in a loan covenant/bond indenture.
b. Bond Retirement Reserve	Funds specifically set aside to retire debt as it is scheduled.
c. Capital Improvement Reserve	Funds specifically set aside to meet long-term objectives for major facility expansion, improvement and/or the construction of a new facility.
d. Replacement Reserve	Funds specifically set aside for the future replacement of equipment needed to maintain the integrity of the facility over its useful life.